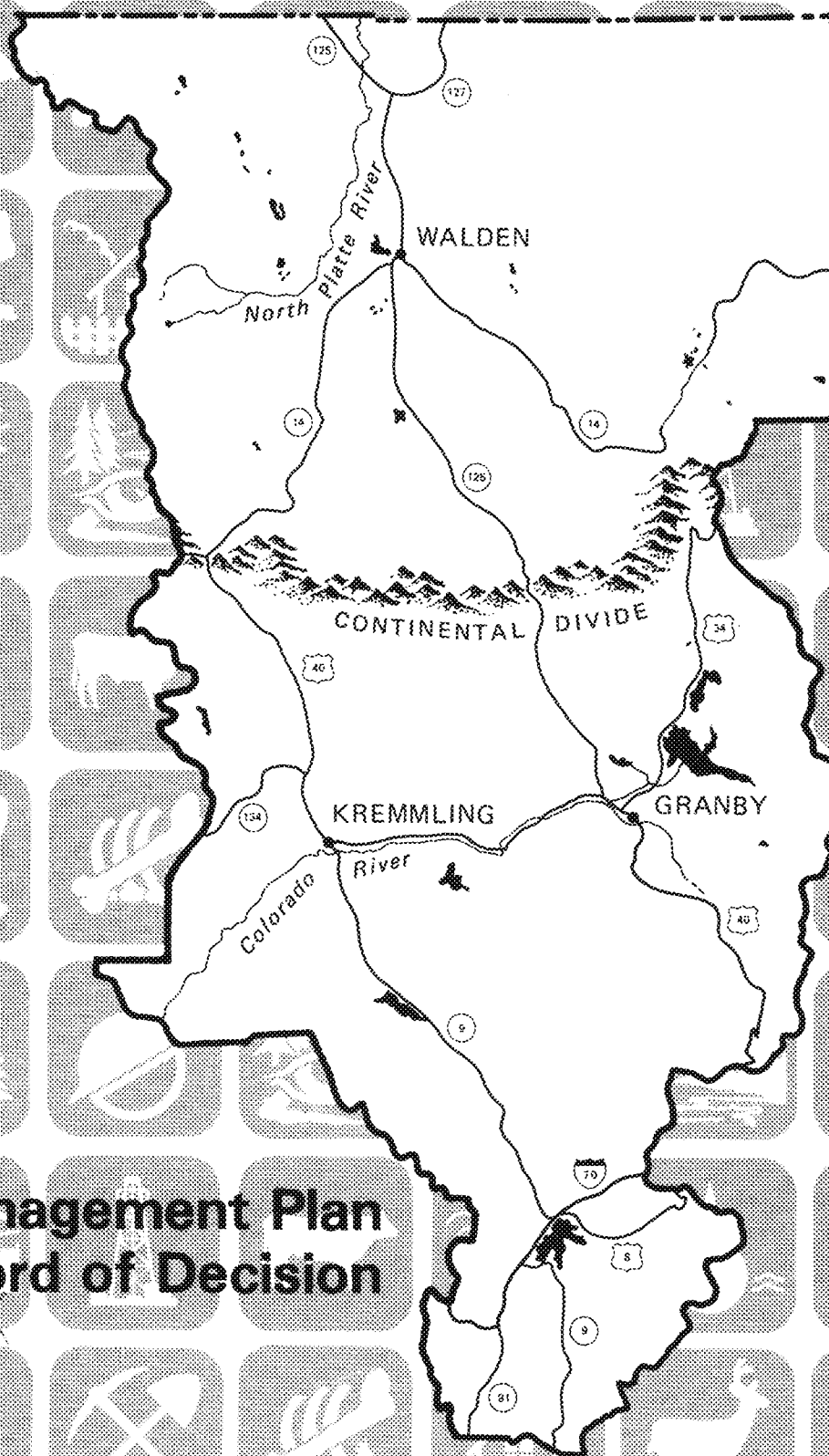


# KREMMLING RESOURCE AREA



## Resource Management Plan Record of Decision

U.S. DEPARTMENT OF THE INTERIOR  
Bureau of Land Management • Colorado

**KREMMLING RESOURCE MANAGEMENT PLAN  
RECORD OF DECISION**

**Prepared by**  
**BUREAU OF LAND MANAGEMENT**  
**U.S. DEPARTMENT OF THE INTERIOR**

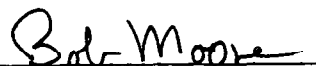
# **RECORD OF DECISION**

## **Kremmling Resource Management Plan**

### **Kremmling Resource Area**

#### **Craig District**

#### **Kremmling, Colorado**

A handwritten signature in black ink, appearing to read "Bob Moore", is written over a horizontal line.

**Associate State Director**

**COLORADO STATE OFFICE**

This document records the decision to accept the Proposed Resource Management Plan (Preferred Alternative) for the Kremmling Resource Area, Craig District, Final Resource Management Plan/Environmental Impact Statement. This plan emphasizes the management, production, and use of renewable resources on the majority of the 398,000 acres of public land in the Kremmling Resource Area on a sustained yield basis. Additionally, this plan would direct Bureau actions to enhance local and regional economic growth. The following major resource decisions are incorporated as part of the plan:

1. All locatable minerals on Federal lands in the planning area remain open to entry under provisions of the Mining Law of 1872 as amended, except on a 680-acre exclusion under protective withdrawal for the Windy Gap archaeological site. All Federal lands remain open to oil and gas leasing and development. 671 acres in the North Sand Hills, is closed to agricultural and mineral entry. Future coal leasing is identified as a priority on 45,000 acres of Federal lands for the continuation and expansion of the coal industry in Jackson County.
2. The Cretaceous Ammonite Site, a significant marine invertebrate fossil location north of Kremmling, is designated as a Research Natural Area with the signing of this document.
3. Intensive management will be applied to substandard or unstable stream channels and sensitive watersheds, which constitute only 3 miles, or 2 percent, of the total stream miles in Kremmling Resource Area.
4. Range forage allocations are made for both livestock and big game populations. The allotments targeted to receive priority for increased management to improve forage production and conditions constitute 180,585 acres, or 51 percent of the public land under grazing permit. Initial allocations are 39,726 animal unit months (AUMs) for livestock and 26,191 AUMs for big game species. Proposed livestock allocation changes range from an increase of 470 percent to a decrease of 83 percent on specific allotments.
5. Intensively managed forested lands equalling approximately 40,000 acres will continue to be managed to produce forest products on a sustained yield basis. This is a reduction of

approximately 10,000 acres from present management. The annual allowable harvest will be reduced from approximately 5 million board feet to approximately 4.5 million board feet. Exact allowable cut figures will be established in 1987 with the completion of the new timber production and operations inventories.

6. Wildlife habitat will be managed for optimum population levels as determined by Colorado Division of Wildlife's Strategic Plan, with special emphasis given to critical and important wildlife habitat. Forage allocation for big game will be raised from the present 21,949 AUMs to 26,191 AUMs, with habitat improvements managed to support mule deer. No specific areas have been designated as wildlife protection areas, although the Upper Colorado River Wildlife Habitat Area will be managed to enhance big game critical winter range for deer and elk.
7. The North Park Phacelia Site which provides critical habitat for *Phacelia formosula*, a federally listed endangered plant species, is designated as a Research Natural Area with the signing of this document.
8. The Upper Colorado River and the North Sand Hills will be managed as Special Recreation Management Areas (SRMAs). The Upper Colorado River SRMA will be managed to provide and maintain floatboating opportunities and associated activities along a 14-mile stretch of the river between Gore Canyon and State Bridge. The North Sand Hills SRMA will be managed to protect the cultural resources and the dune environment while allowing off-road vehicle use to continue.
9. The Troublesome Wilderness Study Area is recommended as non-suitable for wilderness designation. It will be managed under Bureau interim management policies for wilderness study areas until Congress has reached a decision on the final status of the area. If Congress does not designate the Troublesome as a wilderness area, it will be managed for multiple use, with emphasis on livestock grazing in the western portion of the area and intensive forest management in the eastern portion.
10. Cultural resources will continue to be managed under limited management practices with the

exception of the Windy Gap Site area and the sites in the North Sand Hills, which will be intensively managed. Protective measures in North Sand Hills consist of fencing and surveillance during high-use weekends, which reduce the risk of vandalism and man-caused disturbance to these resources. The Windy Gap sites are protected under a withdrawal from mineral entry to preserve these cultural resources that have national significance.

11. The Bureau will attempt to consolidate ownership of public lands in the Kremmling Resource Area by considering boundary adjustment proposals between state and Federal agencies and by consolidating land patterns through land exchanges, acquisitions, and disposals. Under present management, no areas had been designated for disposal. A total of 18,700 acres is available for disposal under exchange or sale with the signing of this document.
12. Off-road vehicle restrictions will be placed on approximately 12 percent of the public land in the Kremmling Resource Area. This will be done to preserve the dune environment in North Sand Hills and to improve the quality of hunting experiences while discouraging private land trespass in the Dice Hill area. Other reasons for restrictions are to preserve critical big game winter habitat on Lawson Ridge and to protect an important waterfowl nesting area in Hebron Sloughs. Additional areas will be restricted to designated roads or seasonally closed to protect wildlife, critical habitat or significant cultural resources.
13. Since the publication of the Final Kremmling Resource Management Plan, June 1984, a policy change regarding the disposal of public lands has become effective. This policy change will affect all Category II lands as identified in Appendix 10 and Appendix 12 of the Final Resource Management Plan. The map legend for Appendix 12, Category II lands should read "Public lands which will be considered for sale, exchanges, public purpose disposal action or other types of disposal". Presently, lands no longer have to be identified for sale for two years prior to entertaining other disposal options. This policy change will allow for greater flexibility in the disposal of public lands. These alternative methods of disposal will be used

when a greater public benefit can result. Adverse environmental impacts resulting from alternative disposal methods will be no greater, and in some cases less, than those identified in the Final Kremmling Resource Management Plan.

### **Alternatives Considered**

Seven alternatives were identified and considered in the final Resource Management Plan. All alternatives considered were consistent with the principles of multiple use and sustained yield, and all were compatible with officially approved or adopted resource plans or related programs, policies, laws, or regulations of local, regional, state, or Federal agencies or governments. Other alternatives were eliminated because they did not meet the above criteria. The alternatives considered were: Continuation of Present Management (No Action), Proposed Resource Management Plan (Preferred), Energy and Minerals, Economic Benefit, Renewable Resources, Recreation, and Natural Environment.

The Continuation of Present Management (No Action) Alternative provides for management of all resources at current levels. Wilderness management must change as a result of this plan, however. Wilderness values could not continue to be protected under interim management according to the Federal Land Policy and Management Act (FLPMA). The Present Management (No Action) Alternative recommends the Troublesome Wilderness Study Area as unsuitable for wilderness designation.

The Energy and Minerals Alternative focuses attention on the exploration, development, and transportation of energy, energy minerals, and critical minerals resources. Multiple use management would be directed toward expediting energy development through maximizing areas available for energy and mineral production.

The Economic Benefit Alternative would maximize the production of goods and services on public lands in the Kremmling Resource Area in order to meet anticipated local and regional demands. Priority emphasis would be placed on resources which would best contribute to developing the economy of the region, such as increasing livestock forage opportunities, maximizing opportunities for coal leasing, and the developing of recreational opportunities.

The Renewable Resources Alternative would favor

management of renewable resources on a sustained yield basis in order to support the local economy and meet local, regional, and national needs. Intensive management of renewable resources would be increased above present levels, especially for grazing and wildlife forage production. The conditions of sensitive watersheds would be improved through intensive management practices.

The Recreation Alternative would place emphasis on enhancing recreational opportunities on the public lands both for existing use levels and projected long-term demand. Multiple use and sustained yield objectives for all resources would continue to be met, as would environmental protection requirements.

The Natural Environment Alternative would emphasize protection, maintenance, and enhancement of the current natural environment. Multiple-use, sustained yield practices would continue to maintain existing industries.

The Proposed Resource Management Plan (Preferred Alternative) emphasizes the management, production, and use of renewable resources on the majority of the public lands in the Kremmling Resource Area on a sustained yield basis. In this respect, it is similar to the Renewable Resource Alternative. However, it also emphasizes the expansion of local and regional economies where Bureau actions can influence economic growth. The management of locatable minerals, oil and gas, visual resources, wilderness, and cultural resources would continue as described in the Present Management Alternative. A total of 45,000

acres of land is available for future leasing of coal under this alternative, which is an increase of 39,000 acres over what is available presently. This alternative was chosen because it provides the broadest opportunity to manage all resources according to Bureau goals. The decision to choose this alternative considered the issues, the alternatives and their environmental consequences, public comment on the Draft RMP/EIS and conformance with other plans, programs, policies, laws, and regulations.

A Rangeland Program Summary was prepared concurrently with the Record of Decision. The Summary identifies the grazing decisions reached under the Proposed Resource Management Plan. It describes the procedures to be used to arrive at decisions for those allotments in the Improve Category. Opportunities to comment on individual grazing decisions will be afforded and adversely affected parties may protest and appeal the decisions. Rangeland Program Summary Updates will be prepared as necessary to summarize decisions issued, progress made, and any significant changes identified from the original Summary, along with reasons for the changes.

All actions proposed for implementation under this plan will allow for adequate consideration to be given to all resources prior to action being taken. Mitigation referred to in the Proposed Plan will be expanded upon as necessary in site-specific activity plans, environmental assessments, or impact statements. Monitoring will be performed on a periodic basis to ensure conformance with the plan and to ensure that adequate measures are taken to protect the environment.

12/19/84

Date



Associate

**Kannon Richards**

**Colorado State Director**

**Bureau of Land Management**

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## **MAP LIST**

1. Kremmling Resource Management Plan

# **I. INTRODUCTION**

This plan contains the decisions on all land use proposals presented in the May 1984 final environmental impact statement. It describes in general terms the overall program objectives, the planned actions for each program, any special implementation needs required during program implementation, particular rationale which may have been employed in developing a program objective, such as budget or policy constraints, any implementation stages and accompanying priorities, and finally, the program monitoring plan and schedule.

This plan does not present information on the existing environment, environmental consequences, or effects of present management. This information was presented in the draft and final environmental impact statements, which may be obtained by contacting the Kremmling Resource Area office.

Appended to this document (Appendix B) is a rangeland program summary. The rangeland program summary summarizes the livestock grazing management program and grazing decisions which will be reached through this plan and through consultation with affected parties. The summary describes which management level category each allotment falls into and provides a proposed schedule for issuance of grazing decisions once stocking rates are known. It also details the studies and actions to be taken to determine proposed stocking rates.

Ownership consolidation proposals are listed by parcel and are reprinted as Appendix C. Category II lands have been affected by a policy change regarding disposal opportunities since the publication of the final environmental impact statement. Category II lands will now not only be considered for sale but also for exchange, public purpose disposal action, or other types of disposal.

## **A. PURPOSE AND NEED**

This plan provides a broad framework for multiple use management on public land. The plan sets land use priorities, establishes broad production goals, protects important resource values and identifies areas where the opportunity exists to consolidate ownership.

In addition to meeting the requirements in the Federal Land Policy and Management Act of 1976 for

land use planning (43 CFR, Part 1600), this plan satisfies the BLM policy to (1) identify lands suitable for wilderness designations (the study phase of BLM's wilderness review process); (2) identify lands with potential for coal leasing (43 CFR, Part 3400); (3) respond to the court mandate (Natural Resources Defense Council et. al. versus (Watt Civil Action 1983-75)) requiring the BLM to complete a livestock grazing environmental impact statement; and (4) identify public land as open, closed, or limited for off-road vehicle use (Executive Order 11989).

## **B. DESCRIPTION OF THE PLANNING AREA**

The Kremmling Resource Area is located in north central Colorado 100 miles east of the BLM Craig District Office (Fig. 1-1). It is bordered on the north by the State of Wyoming; on the east by the Roosevelt and Arapaho National Forests and Rocky Mountain National Park; on the south by the Grand Junction BLM District, White River National Forest, and Arapaho National Forest; and on the west by the Routt National Forest.

Of the 1,222,880 acres of land within the resource area boundaries, 33 percent (398,275 acres) is public land administered by BLM, 57 percent is privately owned, 9 percent is state land, and 1 percent is administered by other Federal agencies. The area lies primarily within Grand and Jackson Counties with smaller parts in Summit, Eagle, and Larimer Counties.

## **C. IMPLEMENTATION**

Decisions in the plan will be implemented over a period of years and must be tied to the BLM budgeting process. Therefore, priorities have been established for each resource to guide the order of implementation. The priorities link the planned actions in the resource management plan with the budget process. Priorities for each program will be reviewed annually to help develop the budget for the coming year. The priorities may be revised based upon new administrative policy, new Departmental directions, or new Bureau goals. The priorities of implementation are presented by resource in Chapter 2. No unusual funding levels are anticipated in order to implement projects under this plan.

## CHAPTER I

### KREMMLING RESOURCE AREA

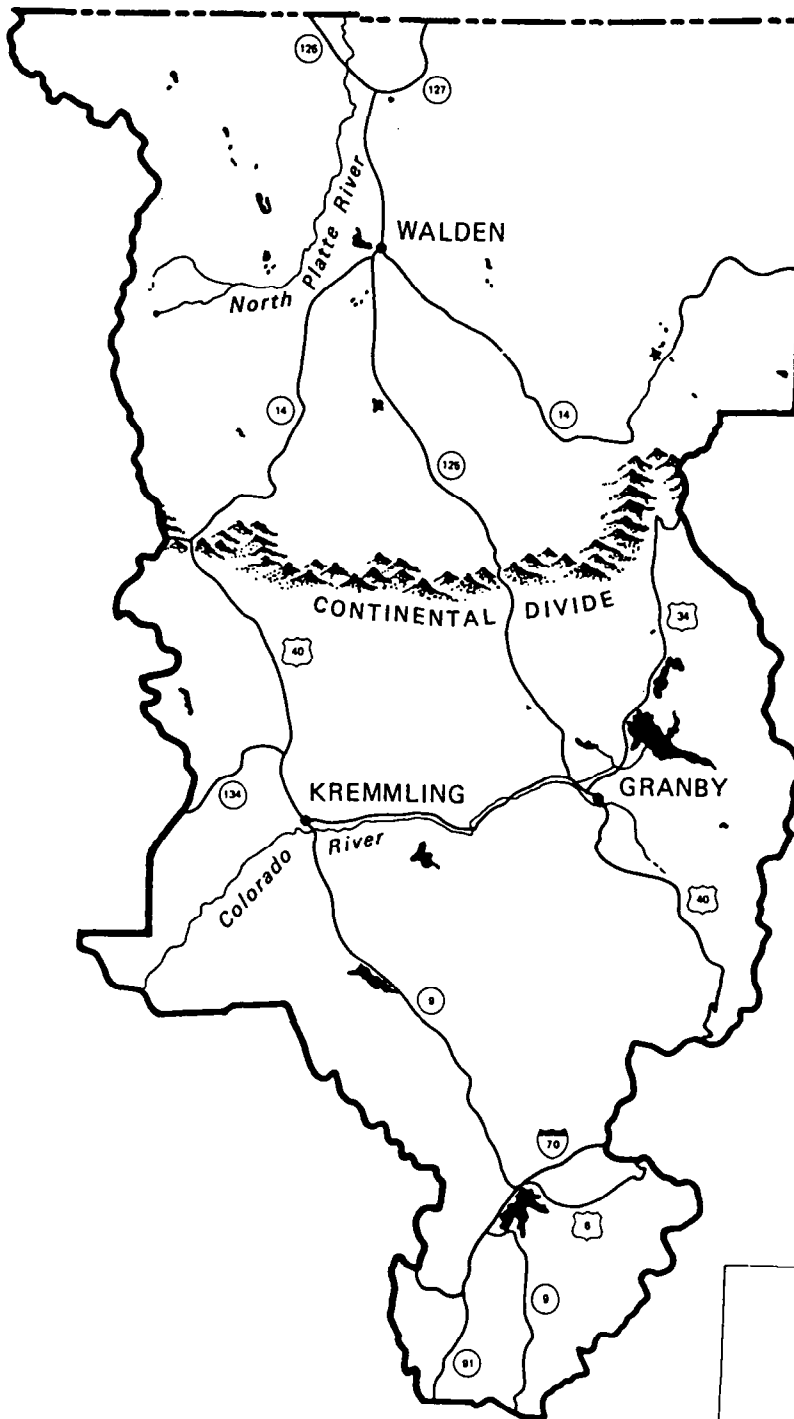
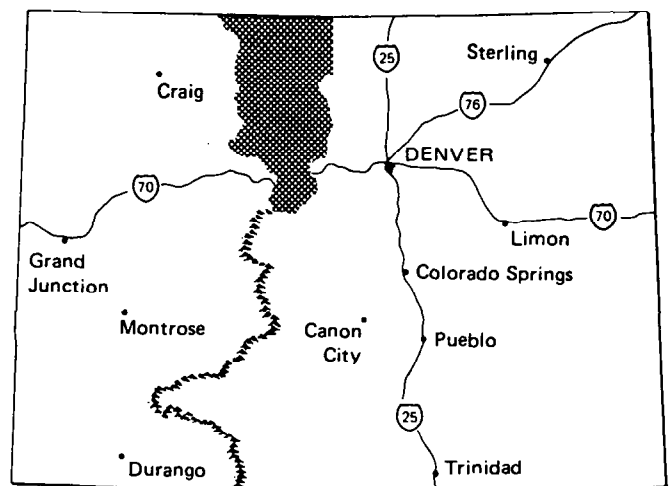


Figure 1-1  
Location Map



COLORADO

## **INTRODUCTION**

### **D. MONITORING**

This plan will be monitored and evaluated on a periodic basis, based upon the sensitivity of the resources to the decisions involved. This type of monitoring will be conducted to review the plan as a whole to determine the need for revision or amendment. Specific actions within the plan must also be monitored. Individual resources will be monitored as explained in Chapter 2. This type of monitoring will determine whether original assumptions were correctly applied and impacts correctly predicted, whether mitigation measures are satisfactory, whether significant changes have been made in related plans of other federal agencies or state or local governments, or whether new data is of significance to the plan. Monitoring will also help to establish long-term use and resource condition trends and provide valuable information for future planning. Ultimately, monitoring and evaluation will determine whether there is sufficient cause to warrant maintenance, amendment, or revision of the plan.

### **E. MAINTENANCE**

This plan will be maintained as necessary to reflect minor changes in data. This maintenance will be limited to refining or documenting a previously approved decision. It shall not expand the scope of resource uses or restrictions or change the terms, conditions, and decisions of the plan. Maintenance will be documented in supporting records. Minor maintenance changes will be kept on record in the Kremmling Resource Area and Craig District offices. Formal public involvement will not be necessary to maintain the plan.

### **F. AMENDMENTS AND REVISIONS**

This plan may be amended or revised if major changes are necessary. Monitoring and evaluation findings, new data, new or revised policy, a change in circumstances or a proposed action that may result in a change in the scope, terms, or conditions of the plan would warrant an amendment or revision. An amendment will be analyzed either in an environmental assessment or an environmental impact statement. The public and other agencies will be included in the amendment and revision processes.

### **G. VALID EXISTING RIGHTS**

This plan does not affect valid existing rights on public lands. Valid existing rights are those rights to use the public land, which predate the final decision on the plan and arise from a permit, lease, right-of-way or claim. For example, this plan may designate an area as open for oil and gas leasing with a no surface occupancy stipulation. This stipulation will not be retroactively applied to oil and gas leases which already exist in this area. Valid existing rights may be held by BLM, other government entities, or by private individuals or companies.

### **H. ADMINISTRATION ACTION**

Various types of administrative actions will require special attention beyond the scope of this plan. Administrative actions are the day-to-day transactions required to serve the public and to provide optimal use of the resources. These actions are in conformance with the plan. They include issuance of permits for fuelwood, sawtimber, Christmas trees, and competitive and commercial recreation activities; lands actions, including issuance of grants, leases, permits and resolution of trespass; facility maintenance; law enforcement; enforcement and monitoring of permit stipulations; cadastral surveys to determine legal land ownership; signing, and implementing projects. These and other administrative actions will be conducted at the resource area, district, or state offices. The degree to which these actions are carried out will be based upon BLM policy, available personnel, and funding levels.

### **I. CORRECTIONS AND REVISIONS TO THE FEIS**

Changes in the Ownership/Consolidation methods of public land disposal became effective subsequent to the publication of the final environmental impact statement. These changes are a result of policy change at the Colorado State Office level. The policy change will allow for greater flexibility in the disposal of public lands. Alternative methods of disposal such as exchanges, public purpose disposal, or other types of disposal will be allowed in addition to direct sale. These alternative methods of disposal will be used when a greater public benefit can result. The policy change affects all Category II lands as identified in Appendix C.

## RESOURCE DECISIONS

Federal Land Policy and Management Act and 43 CFR 3802 and 43 CFR 3809.

Mineral materials actions will be monitored as determined by the terms and conditions of the specific permit.

### 2. Paleontological Resource Management

#### a. Objective

To protect fossils of scientific interest and give special consideration to those fossils of significant value.

#### b. Planned Actions

Fossils of scientific interest will be protected through limited management. Sites determined to be of significant value to Bureau programs or programs such as the Colorado Natural Areas Program would be considered for special area designation through a plan amendment. The Kremmling Cretaceous Ammonite Site is designated as a Research Natural Area.

#### c. Special Implementation Needs

Consultation with paleontological permit holders will be necessary to establishing the significance of fossil discoveries. The National Natural Landmarks Program, National Park Service, is responsible for the issuance of these permits. Coordination with the Colorado Natural Areas Program on special area designations would be necessary.

#### d. Implementation/Priorities

The Kremmling Cretaceous Ammonite Site will have a physical protection plan written following its designation as a Research Natural Area which became effective with the signing of the Record of Decision on December 19, 1984. Areas underlain by significant fossil resources will have a survey conducted prior to approval of projects involving surface disturbance.

#### e. Monitoring/Schedule

Physical protection measures for the Kremmling Cretaceous Ammonite Site will be monitored on a yearly basis to determine their effectiveness in controlling vandalism.

### 3. Water Resource Management

#### a. Objective

To maintain streams on public lands which meet state water quality standards and gave acceptable channel stability. To protect and enhance ground water and sensitive watersheds in association with actions initiated by other resource programs.

#### b. Planned Actions

All streams on public lands in the resource area which meet or exceed state water quality standards and have acceptable channel stability will be maintained in their present condition through limited management.

Ground water will be protected to maintain its present good quality.

Sensitive watersheds will be protected by placing restrictions on activities that could adversely affect them. Intensive management practices will be applied to sensitive watersheds to improve them.

#### c. Special Implementation Needs

Engineering support will be required in the design and construction of water quality and erosion projects. Specifications and water laws of state, federal, and local authorities will be met.

#### d. Implementation/Priorities

The Muddy Creek Watershed Management Plan will have priority for implementation in conjunction with range and wildlife improvement projects in the same area.

#### e. Monitoring/Schedule

Monitoring criteria will be included in the Muddy Creek Watershed Management Plan which will delineate a procedure for evaluating the effects of watershed improvement projects. Measurements will be made monthly during field season, with additional measurements after storms. Monitoring of water quality on streams will be recorded at least one a year.

### 4. Livestock Grazing Management

A Rangeland Program Summary (RPS) was prepared prior to the approval of the Resource Management Plan in the Record of Decision that outlines the

## RESOURCE DECISIONS

specific details of the proposed livestock grazing program. The proposed plan referred to in Appendix B of this document is now the Resource Management Plan. Outlined below are the major components of the program.

### a. Objective

The main objective of the livestock grazing program will be threefold.

1. To allocate a base level of livestock forage estimated to be 39,726 AUMs, a level that will be refined as monitoring data becomes available.
2. To increase sustained forage production approximately 37% over the long term (20 years) to an estimated level of 54,296 AUMs. This would be accomplished by intensifying management opportunities on 76 large, consolidated grazing allotments representing 51% of the public land in the Resource Area.
3. To improve overall range condition on permitted lands from the current 20% in satisfactory condition to 70%.

### b. Planned Actions

Out of 311 grazing allotments in the Resource Area, 76 are targeted as priority for intensified management. These allotments were identified in the Kremmling RMP-EIS using the Bureau's Selective Management policy as having the most resource conflicts and/or problems and the best potential for improvement. The management actions that would be applied to this group of allotments include the following:

1. Ranking allotments to receive priority management, beginning with those that have wildlife and livestock forage or habitat conflicts and watershed and water quality problems associated with livestock grazing use. Benefit and cost analysis will also be used in the ranking process to insure cost effectiveness of the expected benefits.
2. Adjusting stocking rates to proper allocation levels in accordance with the range condition inventory and monitoring studies data.
3. Designing grazing systems, providing minimum rest requirements, and/or adjusting season of use for all allotments. Grazing allotments may

also be combined for management purposes. Additionally, other agency lands (state, U.S. Forest Service) would be considered for incorporation into consolidated allotment management plans (AMPs).

4. Conducting comprehensive use supervision and monitoring to assess the effectiveness of prescribed grazing systems and/or to refine and update the range condition inventory data.
5. Consulting with all permittees/lessees concerning adjustments in allocation and management decisions affecting their allotments.
6. Investing in cost-effective range improvements (primarily through public investment) to implement grazing systems and meet the specific objectives of AMPs.

Needed range improvements identified for implementing the proposed plan include 20 spring developments, 46 stock ponds, 14 wells, 4 miles of ditch, 18 miles of pipeline, 66 miles of fence, and approximately 45,200 acres of land treatment (brush control and reseeding).

7. Allocating additional forage made available through intensive management practices first to satisfy grazing preferences (restore any suspended nonuse) and second to allow for increases above preference on a case-by-case basis.

### c. Special Implementation Needs

Depending on the location, type, and/or size of the project consultation with other companion agencies such as the S.C.S., Forest Service, State Land Board, or Colorado Division of Wildlife may be required.

As Allotment Management Plans and project schedules and proposals are developed, close consultation with the grazing permittees will be necessary. The Craig District Grazing Advisory Board will be involved in approving project proposals. Local Stockgrowers associations will be kept informed of the progress.

### d. Rationale

The major livestock issues identified in the Kremmling RMP-EIS involved concerns of how livestock and wildlife forage could be properly allocated and what could be done to provide needed range improvements on grazing allotments. The proposed plan focused on

## CHAPTER II

these issues by identifying grazing management as a priority resource program in the Area, emphasizing a balanced allocation of forage resources and targeting a group of priority allotments to receive intensive management (range improvement development).

The proposed plan is also consistent with current Bureau policy to direct available funding and manpower on those areas where problems and conflicts exist with the greatest potential for improvement.

### e. Implementation/Priorities

The grazing program will be implemented in the following order of priority:

1. Enter into mutual agreements and/or render grazing decisions reflecting the allocation of forage to the proper levels indicated by the range condition inventory and monitoring studies. During this process other grazing permit adjustments may be negotiated with the permittee such as changing livestock class, season of use, etc.
2. Develop on an annual schedule Allotment Management Plans and range improvement projects that meet livestock operator needs and resource requirement and objectives. All Allotment Management Plans are scheduled to be completed over the next 10 year period, given adequate funding and manpower to complete the projects. The first group of allotments that a plan will be designed for are the 76 allotments in Management Level 2, the larger allotments having the most substantial resource conflicts/problems. This priority group will be followed by the 20 allotments in Management Level 1 (Maintain) and then the 215 allotments in Management Level 3 (Custodial).
3. Continue to implement a monitoring studies program (featuring actual use-utilization studies) to properly evaluate:
  - a. Adjusted stocking rates on priority grazing allotments
  - b. Grazing use on newly implemented AMPs.

### f. Monitoring/Schedule

As described above, monitoring on priority grazing allotments will be performed on an annual basis as

funding and manpower is available. The primary data collected in the studies will be:

1. Verified actual use records.
2. Grazing utilization using the Key Forage Species Method and correlated with protected utilization cages.
3. Climatic data.

Range trend studies will be conducted on active AMPs as they are implemented.

## 5. Wildlife Habitat Management, Including Threatened and Endangered Species

### a. Objective

Manage public land habitat to support optimum wildlife population levels as determined by the Colorado Division of Wildlife's Strategic Plan. Emphasis will be placed on intensively managing critical and important wildlife habitats including 326,000 acres of upland, 3 miles of riparian, 3,000 acres of wetlands and 53 miles of stream. All threatened and endangered plant and wildlife habitats will be protected as required by law and regulation.

### b. Planned Actions

The following actions will be utilized to meet the above stated objectives:

#### 1. Habitat Management Plans (HMP's)

Two HMP's have been written and are currently being implemented, the North Park HMP and the Upper Colorado River. A priority for the wildlife program is to write and implement a third HMP addressing public land wildlife habitat in Middle Park. The HMPs' list priority wildlife species and projects designed to improve habitat for these species.

#### 2. Forage allocation

Range forage will be allocated to optimize big game populations and livestock production at levels consistent with the Colorado Division of Wildlife's strategic plan. In grazing allotments

## RESOURCE DECISIONS

where optimizing for both big game and livestock is not possible, livestock production will be favored, while providing sufficient forage to support 1980 big game population levels.

### 3. Coordination with other BLM Resources and other Agencies

Activities initiated by other BLM programs will be coordinated to insure consideration of wildlife habitat values in these actions. These programs include forestry, range, lands/realty, and mineral development. The KRA wildlife program will also be coordinated with the Colorado Division of Wildlife and U.S. Fish and Wildlife Service to assure maximum utilization of mutual resources. Cooperative agreements with the CDOW will be utilized when necessary to jointly manage state and public lands with similar wildlife habitat values and management objectives.

### 4. *Phacelia formosa* Research Natural Area

*Phacelia formosa* is found in North Park, an endangered plant species site. The site is designated as a Research Natural Area and maintained for scientific study and education.

### 5. Monitoring wintering bald eagle population levels and winter habitat conditions in Middle Park and the Upper Colorado River areas.

### c. Special Implementation Needs

Consultation and coordination with the Colorado Division of Wildlife will be required on virtually all wildlife related matters in the KRA. Funding will be solicited from the DOW for habitat improvement project implementation on public lands in the KRA.

The U.S. Fish and Wildlife Service will be consulted when threatened/endangered species habitats may be impacted by proposed projects. Waterfowl habitat improvement projects, particularly in North Park, may require coordination with Arapaho National Wildlife Refuge personnel.

### d. Rationale

Public lands within the KRA provide important habitat for numerous species of wildlife. The value of the sagebrush, forest, aquatic, riparian, and wetland ecosystems to wildlife species of high public interest including antelope, elk, mule deer, sage grouse, water-

fowl, and cold water fish, has been well documented on public lands in the KRA. Intensive management of habitats is necessary to assure continued support of the wildlife species dependent upon them for survival.

### e. Implementation/Priorities

The Planned Action described above will be implemented in the following priority order:

#### 1. North Park Habitat Management Plan

Projects designed to improve wetland habitat for waterfowl and upland habitat for sage grouse and big game will be emphasized.

The *Phacelia formosa*, a federally listed endangered plant, site in North Park is designated as a Research Natural Area. This action will be incorporated into the North Park HMP.

#### 2. Upper Colorado Habitat Management Plan

Projects designed to improve upland winter range for big game will be given priority for implementation. In addition, monitoring and protection of bald eagle winter habitat and raptor nesting will be emphasized in this HMP.

#### 3. Forage Allocation

Initial forage allocations have been determined in connection with the development of allotment management plans.

#### 4. Middle Park Habitat Management Plan

This HMP will be written to emphasize big game winter range and aquatic habitat improvement.

#### 5. Coordination/cooperation with other resources and agencies will continue on a regular basis.

### f. Monitoring/Schedule

Wildlife habitat conditions will be continuously monitored depending on funding and manpower limitations. The following techniques will be utilized to monitor habitat conditions:

1. Vegetative measurements will be conducted to monitor winter forage conditions for big game. Some 10,000 acres of critical winter range will be monitored annually in 3 year cycles.

## CHAPTER II

2. Bald eagle winter habitat in the Colorado River drainage will be monitored annually to measure conditions and to determine winter population levels.
3. Raptor nesting habitat will be monitored biannually to determine status and condition.
4. Waterfowl brood counts will be conducted annually in high production areas in North Park.
5. Sage Grouse lek count data will be coordinated annually with the Colorado Division of Wildlife.
6. Aquatic habitats with populations of cold water fish will be monitored annually in cooperation with the Colorado Division of Wildlife. Aquatic habitats with producing populations of trout will be emphasized.

### 6. Forest Management

#### a. Objective

To manage all productive forest land that is suitable for producing a variety of forest products on a sustained yield basis. This action will create a healthy forest environment through continued forest management practices.

#### b. Planned Actions

Intensively manage approximately 40,000 acres of forest acreage. Maintain and protect the remaining forested lands, comprising approximately 60,000 acres, through limited management practices. The planned actions will emphasize improving forest vigor and growth as well as minimizing losses caused by insects, diseases, or fire. The estimated annual allowable harvest will be approximately 4 to 5 million board feet. Intensive management activities could include timber harvesting techniques, artificial regeneration, stand conversion, stand improvement, precommercial thinning, and commercial thinning. Limited management activities will involve primarily custodial practices such as fire protection and salvage.

#### c. Special Implementation Needs

Cadastral survey will be needed for property line determination. Fire management support is needed for management of natural or prescribed fire. Acquisition

of legal access will be needed to open areas for forest management and other resource benefits.

#### d. Implementation/Priorities

Yearly activity plans will specify planned actions, coordinate various resource values, and identify silvicultural practices for the forest resource. Sawtimber and fuelwood sales, timber stand improvement, reforestation, and insect and disease control projects are examples of specific actions proposed in activity plans. Manuals and policy will offer guidance for implementing these actions.

The highest priorities are the highly productive sites in need of improvement. Examples would include decadent stands which are disease or insect infested, poorly stocked stands in need of additional regeneration, overstocked stands that need to be thinned, etc. Another high priority would be when forest management practices are needed to improve another resource.

Examples may include harvesting of pinyon/juniper stands (rather than chaining) for range or wildlife habitat improvement, treatment of insect or disease infested trees that are in recreation sites or are on BLM lands intermingled with private subdivisions, etc. The lowest priority are those healthy stands which do not need any treatment or those stands in the limited management category.

#### e. Monitoring/Schedule

The basic process of monitoring for forestry practices involves on-site inspection of the project. Generally, a pre-work conference is conducted to familiarize the contractor or purchaser with the project area, contract requirements, and other project specifics. During the project life, periodic inspections of the work performance and progress are conducted by the forester. At the end of the project, a final inspection is conducted on proper completion of all contract requirements.

Periodic forest inventories (10–20 years) will be conducted and incorporated with decisions made in this land use plan to define the allowable cut base.

Reforestation surveys are conducted the first, third, and fifth year following harvesting to determine the adequacy of regeneration. If adequate regeneration is not present or anticipated then the area is artificially

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regenerated with the same yearly sequence of surveys to determine the need for additional stocking.

Thinning or other timber stand improvement projects may be monitored by periodic remeasurements of permanently marked plots which compare treated plots with untreated "control" plots.

### 7. Recreation Resource Management

#### a. Objective

To ensure the continued availability of outdoor recreational opportunities which the public seeks and which are not readily available from other sources, to reduce the impacts of recreational use on fragile and unique resource values, and to provide for visitor safety, and resource interpretation.

#### b. Planned Actions

Manage recreation resources and activities throughout the resource area.

The Upper Colorado River and the North Sand Hills would continue to be managed as Special Recreational Management Areas (SRMA's). An activity plan has been completed for the Upper Colorado River SRMA. An activity plan for the North Sand Hills remains to be written. The Upper Colorado River between Gore Canyon and State Bridge would be managed to provide and maintain floatboating opportunities and associated activities in a roaded natural setting. The North Sand Hills would be managed to protect the cultural resources and the dune environment while allowing ORV use to continue in a roaded natural setting.

The remaining public lands in the resource area would receive limited management for dispersed recreation use, such as hunting, hiking, and sightseeing.

Maintain existing recreational facilities in order that they last for their designed life expectancies and so public health and safety are not endangered while on site.

Acquire legal access associated with SRMA's in order that public egress and ingress is insured and enable more effective and responsive management of the resources and facilities related to the SRMA's.

Provide maintenance such as trash pick-up, fence

and parking barrier repair, and occasional visitor contact as needed in dispersed recreation use areas.

#### c. Special Implementation Needs

Cooperation and coordination with the Colorado Division of Parks and Recreation; the U.S. Forest Service, Eagle, Grand, Jackson, and Summit Counties; and adjacent cities will be needed for the development and maintenance of proposed trails and snowmobile parking areas.

Special Recreation Permits for commercial recreational use of public lands and related waters will continue to be issued and administered in accordance with BLM policy. When it is cost effective and beneficial to the issuing agency and/or permittee, a single Special Recreation Permit may be issued from one federal agency for use of BLM administered public lands and USFS administered forest lands and related waters.

#### d. Implementation/Priorities

*Priority 1.* Manage and fund the Upper Colorado River Special Recreation Management Area to provide river recreational opportunities and to reduce resource damage, solve visitor health and safety problems and mitigate conflicts. Issue and administer Special Recreational Permits associated with commercial recreational activities. Also, pursue land acquisition, exchanges, and public access easement that would enhance recreational opportunities and activities.

*Priority 2.* Manage the North Sand Hills SRMA for its unique recreational opportunities and activities, primarily off road vehicle use in open sand dunes. Acquire public access through privately owned land, write and implement a Recreation Area Management Plan, monitor visitor use, provide visitor services, reduce resource damage, and mitigate conflicts.

*Priority 3.* Manage extensive RMA's to provide visitor information, minimal facility development and site maintenance, and public land access. Also manage extensive RMA's to resolve management issues for off-road vehicle (ORV) use. Issue and administer Special Recreation Permits associated with commercial land based recreational activities, primarily hunting guide and outfitting.

#### e. Monitoring/Schedule

The Recreation Area Management Plan (RAMP) for the Upper Colorado River SRMA will continue to

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be implemented. As necessary, the RAMP plan will be updated and amended to be consistent with this plan, changes in Bureau policy, constraints in recreation funding, and newly enacted Colorado State laws and regulations that affect public recreational activities and resources.

Pending the acquisition of public access through privately owned lands, a Recreation Area Management Plan will be written and implemented for the North Sand Hills SRMA. Use will be monitored and visitor service provided, such as information and assistance, especially during peak use summer holiday weekends.

Both the Upper Colorado River and North Sand Hills SRMAs will have regularly scheduled maintenance and management of their developed sites and facilities. Hazards to public health and safety will be mitigated whether by regular preventative maintenance or immediate corrective actions. Visitor services, in particular collection of use statistics and providing visitor information and assistance, will be emphasized during periods of high use such as summer rafting and fall hunting seasons.

Plans and visitor use data will be monitored and reviewed periodically to determine if revisions are necessary because of changing conditions.

### 8. Wilderness Management

#### a. Objective

To recommend the Troublesome Wilderness Study Area (WSA) for non-wilderness designation and to manage the approximately 8,250 acres under BLM interim management policies for wilderness study areas until completion of the wilderness review process.

#### b. Planned Actions

Interim management policies and guidance as defined in BLM's *Interim Management Policy and Guidelines for Lands Under Wilderness Review* will be applied to the Troublesome Wilderness Study Area. These Guidelines have been developed under Section 603 of FLPMA "so as not to impair the suitability of such areas for preservation as wilderness", until Congress makes its decision on whether or not to designate the area as wilderness.

Planned projects in the Troublesome Wilderness

Study Area will be evaluated to ensure compliance with interim management policy. The WSA will be patrolled periodically to detect and prevent unauthorized actions.

A separate EIS and Study Report will be prepared and submitted to the Secretary of the Interior who will forward the final recommendations to the President. If the non-wilderness recommendation presented in the Final RMP is adopted, then the area will be managed for multiple use, with emphasis on intensive forest management and continued range management for livestock.

#### c. Special Implementation Needs

Routine checks will be conducted in conjunction with other activities. Fire management support will be needed for management of natural fire in meeting the resource objective and for the protection of unique and fragile resources.

#### d. Implementation/Priorities

Not Applicable

#### e. Monitoring/Schedule

Field checks will be conducted annually during the interim management period in order to ensure that no unauthorized actions have taken place that would "impair the suitability of the area for preservation as wilderness".

### 9. Off-Road Vehicle Management

#### a. Objective

To protect fragile and unique resource values from damage by off-road vehicle (ORV) use and to provide ORV use opportunities where appropriate.

#### b. Planned Actions

All public lands are designated as open, limited, or closed to ORV use (as shown on the Resource Management Plan Map). Information and supervision will be provided for limited and closed areas.

Designations are based on protecting public lands resources (e.g. soil, watershed, vegetation, and wildlife) and minimizing conflicts among various uses

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of the public lands. Designations are made in accordance with the criteria set forth in 43 CFR Part 8340. Under this plan 12 percent of the public lands in the resource area are subject to restrictions, with the remaining 88 percent being open (i.e. not subject to restrictions). The following areas have been limited or closed to ORV use:

**Table 2-1**  
Off-Road Vehicle (ORV) Designations

Area	Limitations	Seasonal Closure
North Sand Hills	Existing roads & trails open sand areas	-----
Hebron Sloughs	Designated roads & trails	June 1 to August 1
Strawberry	-----	December 15 to May 1; snowmobiles excepted
Windy Gap	Designated roads & trails	-----
Sulphur Gulch	Designated roads & trails	Black Mountain road- snowmobiles excepted December 15 to May 1
Lawson Ridge	Existing roads & trails	-----
Resource Conservation Area	Designated roads & trails	-----
Dice Hill	Designated roads & trails	-----
Inspiration Point Flats	4-wheel drive vehicles only; road leading from bench to Colorado River	-----
Troublesome WSA	Closed to ORV's except as allowed by BLM's Interim Man- agement Policy	-----

### c. Special Implementation Needs

Law enforcement support will be needed to enforce closures and limitations. Coordination with the public will be necessary during the development of the Off-Road Vehicle Management Plan.

### d. Implementation/Priorities

An Off-Road Vehicle Management Plan will be written and implemented for the Dice Hill area.

Seasonal road closures will continue to be maintained by means of locked gates and public notice through local newspapers.

North Sand Hills will continue to be patrolled during high use weekends in order to enforce posted designations.

### e. Monitoring/Schedule

Roads which are subject to seasonal closure will be checked yearly to ensure that gates are locked at the start of the enforcement period and unlocked when the restrictions are lifted.

Routine patrols on high use weekends will be performed in North Sand Hills in order to protect the dune environment and cultural resources.

Dice Hill road closures will be regularly patrolled during hunting season to ensure compliance with the restrictions and to prevent trespass onto surrounding private lands.

## 10. Cultural Resource Management

### a. Objective

To inventory, evaluate, mitigate, and/or protect cultural resources, giving priority to those which are associated with proposed actions where surface disturbing activities will occur. The preferred method of cultural resource mitigation or protection is to avoid sites by project design. Sites which are eligible to or on the National Register of Historic Places will receive some additional degree of protection.

### b. Planned Actions

Complete Class I Cultural Resource Inventory for the Kremmling Resource Area. This baseline inventory will serve as a starting point for evaluating archaeological resources in the Kremmling Resource Area.

Protect the Windy Gap Archaeological Site through periodic site monitoring and withdrawal from mineral entry.

Protect the North Sand Hills Archaeological Sites through periodic site monitoring and physical protection as outlined in the North Sand Hills Recreation Area Management Plan to be developed.

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Review all proposed actions involving surface disturbance in order to evaluate potential affects upon cultural resources. Mitigate or protect cultural resources which may be impacted.

### c. Special Implementation Needs

Support will be needed from Craig District Office personnel to create and maintain a computerized data file for Class I inventory data. Operations or fire management support could also be needed for physical protection or site stabilization projects as identified.

Consultation with the State Historic Preservation Office will be needed when sites could potentially be impacted by proposed projects. Sites eligible to or on the National Register of Historic Places could also require consultation with the Advisory Council of Historic Places.

### d. Implementation/Priorities

Sites which are associated with surface-disturbing projects receive top priority for inventory, evaluation and mitigation or protection.

Intensively manage the North Sand Hills (10 acres) and Windy Gap (700 acres) Archaeological Sites. Actions include maintenance of physical barriers and signs around North Sand Hills sites and routine compliance checks at North Sand Hills and Windy Gap.

Complete Class I Cultural Resource Inventory of archaeological sites in Kremmling Resource Area.

### e. Monitoring/Schedule

North Sand Hills sites will be monitored at least twice a year, during or immediately following high-use weekends, such as Memorial Day and Labor Day.

Class I inventory data will be updated whenever needed to ensure that the data base is kept current.

## 11. Ownership Consolidation

### a. Objective

Improve the efficiency and effectiveness of public land management by identifying public land suitable for retention or a variety of disposal actions including land sales, exchanges, state selection, inter-agency

boundary adjustments, Recreation and Public Purposes leases or purchases and Section 302 leases. Ownership consolidation will provide a more compact and manageable land base which would promote a plan-driven, efficient and effective management of the public lands within the Resource Area.

### b. Planned Actions

Dispose of approximately 18,700 acres or 5% of the Resource Area's public land through sales, exchanges, state selections, boundary adjustments, Recreation and Public Purposes leases and patents and Section 302 leases. Approximately 1,000 acres have been selected by the Colorado State Board of Land Commissioners under Section 7 of the Statehood Act of March 3, 1875. Approximately 1,450 acres have been identified primarily for exchanges. Approximately 2,500 acres have been identified primarily for special disposals which would be in the public interest and benefit federal and other governmental agencies' management programs. Approximately 14,000 acres have been primarily identified for disposal through land sales. Disposals would require site-specific Environmental Assessments.

Public lands considered suitable for disposal would be:

1. Tracts in the Grand Lake, Granby, and Fraser areas that would support or enhance their recreational and tourism based economy.
2. Inholdings within large blocks of state or other Federal lands.
3. Public lands adjacent to large blocks of state or other Federal lands that would be best managed by that agency.
4. Public lands overlying other mineral estates (state minerals, public surface).
5. Isolated tracts that:
  - a. Have no important wildlife habitat values (winter range, nesting areas, mating areas etc.).
  - b. Are not within a sensitive watershed or riparian area.
  - c. Are in areas where Bureau initiated range management opportunities are limited because of size, isolation, and site potential.

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d. Are lands where Bureau initiated forest management opportunities are limited because of tract size, stand size, access difficulties, or adverse sites.

e. Have no resource values of major significance.

Acquire lands for public ownership which would benefit overall public land management. Site-specific environmental assessments would consider acquisition needs.

Land considered for acquisition would include:

1. Inholdings of private, state, or other Federal land within large blocks of public lands.
2. Land adjacent to intensively managed tracts of public land where overall program management would be enhanced, such as lands adjacent to special recreation management areas, intensively managed forest sites, grazing allotments, or important mineral areas.
3. Lands of mineral importance where the Federal minerals are overlain by state or private surface ownerships.

Refer to Ownership Consolidation-Land Tenure Adjustment in Appendix C.

### c. Special Implementation Needs

Support needs include appraisal work, records notation, document preparation, cadastral surveys, mineral reports, water rights reports and cultural resource inventories. The majority of this support does not exist at the resource area level and would require CDO and CSO support. Consultation would be required with such entities as the general public, local government, other agencies as necessary.

### d. Implementation/Priorities

Actions will be handled based on public requests

and proposals. Generally, Good Neighbor Program actions will be considered a priority, such as Recreation and Public Purpose actions and exchanges which benefit both the public and the government.

### e. Monitoring/Schedule

Not Applicable

## C. SUPPORT

Support will be needed to evaluate and consider visual resources during the environmental assessment process and to manage visual resources in regard to actions proposed. The objective of the visual resource program is to maintain the existing limited management level for sensitive Class II areas (those areas seen from major travel routes and adjacent to intensive managed recreation areas).

Transportation management, utility and communication facility management and fire management are programs which truly support the day-to-day administration of other resource area programs. For example, communication facility authorization provides a service to all administrative program functions as well as interagency and community needs. Fire management activities support range, wildlife, and forestry programs and may also serve the local community and other agencies.

Support will be necessary to implement many of the projects under this plan. Cadastral support could be needed for lands and realty actions, forestry and wildlife projects, range improvement projects and transportation and access problems. Engineering support would be required for watershed projects, wildlife and forestry project implementation and range improvement projects. Appraisal staff support will be needed to assess lease, permit and grant valuations for realty actions. Cultural resource support will be needed to evaluate impacts to cultural resources for all surface-disturbing projects proposed under this plan. Support from all resources will be needed to complete environmental assessments on projects proposed under this plan.

## **APPENDICES**

# **APPENDIX A DEFINITIONS FOR LAND USE PRIORITIES IDENTIFIED ON RESOURCE MANAGEMENT PLAN MAP**

## **INTRODUCTION**

Land use priorities addressed in the RMP and shown on the Resource Management Plan Map are defined below. Each resource listed has specific areas identified on the Resource Management Plan Map where it has been assigned as a priority for management. The principles of multiple use and sustained yield are maintained in each priority area, although specific resources would have management emphasis. Compatible and excluded uses are listed under each resource.

## **COAL**

Federal lands leased for coal or suitable for future consideration for coal leasing are shown as coal priority areas. New coal leases would occur only on these areas. Priority would be given to leasing and developing these lands for the production of a known coal resource. Either surface or underground mining methods would be allowed after approval of a mine plan. Other uses would be allowed on these lands to the extent they did not interfere with the development of coal resources. Investments in land treatments and improvement projects for intensive management of other resources should be postponed until coal development is completed and the site is rehabilitated.

## **Compatible Uses**

Uses that could occur on these lands prior to coal leasing and/or development are:

**Oil and Gas** – Lands would remain open to oil and gas leasing. Potential development conflicts between oil and gas and coal would be resolved on a case by case basis.

**Minerals** – Lands would remain open to location of mining claims. Development would be constrained so as not to interfere with coal development.

**Material Sales** – Material sales would be allowed,

provided they did not conflict with the development of coal.

**Livestock Grazing** – Livestock grazing would be allowed to continue until it conflicted with coal development. No major public investments for intensive management or improvements would be made until after coal was developed.

**Forest Products** – Harvesting of forest products would be allowed until it conflicted with coal development. Limited management would occur. No investments in intensive management would be made until after coal was developed.

**Soils and Watershed** – Soil and watershed values would be protected through limits or restrictions placed on coal development.

**Water** – Water quality would be protected through limits or restrictions placed on developing coal.

**Recreation** – Dispersed recreation would be allowed until it conflicted with coal development.

**Wildlife** – Critical wildlife habitats, including threatened and endangered species habitats, would be protected by limits or restrictions placed on the development of coal. Loss of other important habitats would be mitigated.

**Cultural Resources** – Important cultural resources would be protected by limits placed on coal development.

**Major Realty Actions** – Major realty actions, such as rights-of-ways, could be placed on lands as long as they did not interfere with coal development.

## **Excluded Uses**

The following uses would not be allowed on coal lands:

**Livestock Grazing** – No funds would be invested in

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**Forest Products** – Both intensive and limited management of forest lands would be allowed. Limits would be required for certain management practices to protect the priority use.

**Soil and Watershed** – Soil and watershed values would be protected or improved through management on these lands.

**Water** – Water quality would be protected or improved through range management.

**Recreation** – Developed recreation sites and special recreation management areas could be established, provided they were constrained so as not to conflict with livestock grazing or range management. Dispersed recreation would be allowed.

**Wildlife** – Critical habitats, including those of threatened and endangered plants and animals, would be protected or improved through management, provided that management was restricted so as not to conflict with livestock grazing or range management. Other wildlife habitats could be improved through the application of range management practices where practical.

**Cultural Resources** – Important cultural resources would be protected. More intensive management of cultural resources could occur to the extent it did not interfere with livestock grazing or range improvement.

**Major Realty Actions** – Major realty actions could occur, provided they did not interfere with livestock grazing.

**Scenic Areas** – Limited protection would be provided for visually sensitive areas.

### Excluded Uses

The following uses would be excluded from livestock grazing priority areas:

**Coal** – Lands would not be leased for coal development.

**Wilderness** – Livestock priority lands would not meet the criteria for wilderness designation.

## FOREST PRODUCTS

Public lands in forest product priority areas would

be committed to the growth and harvesting of commercial forest products through intensive management.

These areas are suitable for growing and producing forest products on a sustained yield basis.

Other uses would be allowed, provided they did not significantly interfere with the intensive management of these lands for forest products.

### Compatible Uses

Uses that could occur on these lands are:

**Oil and Gas** – Lands would remain open to oil and gas leasing and development. Limits would be placed on these activities to minimize the loss of productive forest lands.

**Minerals** – Lands would remain open to the location of mining claims. The priority forestry use would be protected through limits placed on mineral exploration and development.

**Livestock Grazing** – Livestock grazing and range management would be allowed. Limits would be required on grazing or management practices that could significantly interfere with the growth and management of forest products.

**Soil and Watershed** – Soils and watersheds would be protected or improved through management.

**Water** – Water quality would be protected or improved through management.

**Recreation** – Special recreation management areas or developed recreation sites could be established, provided they did not interfere with intensive forest management. Dispersed recreation would be allowed.

**Wildlife** – Critical habitats, including plant and animal threatened or endangered species habitats, would be improved through management. Other wildlife habitats could be improved through the application of intensive forest management practices where practical.

**Cultural Resources** – Important cultural resources would be protected. More intensive management could occur if it did not interfere with intensive forest management.

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**Major Realty Actions** – Only those actions that did not take productive forest land out of production would be allowed.

**Scenic Areas** – Visually sensitive areas may be protected through limits placed on intensive forest management.

### Excluded Uses

The following uses would be excluded from forest product priority areas:

**Coal** – Coal leasing would not be allowed.

**Material Sales** – Mining of sand and gravel or other saleable materials would not be allowed on productive forest sites.

**Community Expansion** – Productive forest lands would not be taken out of production for community expansion.

**Wilderness** – Lands prioritized for forest products would not be considered for wilderness designation.

**Realty Action** – Actions, such as certain rights-of-way, which take productive forest land out of production would not be allowed.

## WILDLIFE

Public lands where the priority use is wildlife habitat are portrayed on the alternative maps. Both aquatic and terrestrial habitat and improvement projects would be implemented because of the importance of these areas to wildlife. Other land uses would be permitted, provided they did not significantly interfere with wildlife habitat values.

### Compatible Uses

Uses that could occur on these lands are:

**Oil and Gas** – Lands would remain open to oil and gas leasing and development. Restrictions would be placed on development to protect wildlife habitat.

**Minerals** – Lands would remain open to the location of mining claims. Wildlife habitat would be protected by limits placed on mineral exploration and development.

**Material Sales** – Material sales would be allowed, provided they did not interfere with wildlife habitat values.

**Forest Products** – Both intensive and custodial management of forested lands would be allowed, provided this management did not adversely impact wildlife habitat values. Management practices designed to enhance the wildlife habitat values in these areas would be stressed.

**Soil and Watershed** – Management practices that did not adversely impact wildlife habitat values would be permitted to protect or improve soil stability and watershed conditions.

**Water** – Water quality would be protected or improved by management.

**Recreation** – Developed recreation sites or dispersed recreation activities could occur, provided they did not adversely impact wildlife habitat values.

**Cultural Resources** – Important cultural resource would be protected in wildlife areas. Intensive cultural resource management could occur to the extent it did not interfere with wildlife habitat values.

**Realty Actions** – These could occur to the extent they did not adversely impact wildlife habitat. Realty actions, such as acquisition of lands, that would provide important wildlife values would be requested.

**Scenic Areas** – Limited protection would be provided for visually sensitive areas.

**Livestock Grazing** – Livestock grazing could occur, provided competition with wildlife for forage did not occur. Either intensive or custodial management levels could be employed. Livestock grazing management practices designed to benefit wildlife habitat would be utilized.

### Excluded Uses

The following uses would be excluded from wildlife habitat priority areas:

**Coal** – Certain habitats, including those with threatened or endangered plants or animals, would generally not be leased for coal. Coal leasing could occur in these areas if suitable mitigation for loss of wildlife habitat was undertaken.

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**Wilderness** – Lands prioritized for wildlife habitat would not meet criteria for wilderness designation.

**Community Expansion** – Wildlife habitat lands would not be suitable for community expansion.

### PROTECTED AREAS

Federal lands containing values protected under law are shown as protected areas on the maps. They include threatened and endangered plant and wildlife habitats, National Register cultural sites, alluvial valley floors, and other critical or significant values. Uses that disturbed, damaged, or threatened these values or uses would be excluded.

### Compatible Uses

The following uses could occur on protected areas, provided they were properly restricted to protect significant values.

**Oil and Gas** – Lands would remain open to oil and gas leasing. Surface occupancy restrictions would be included in the leases to protect present values.

**Livestock Grazing** – Livestock grazing would be allowed, provided grazing did not interfere with values present. Limits would be placed on types of management practices allowed.

**Forest Products** – Custodial or limited management of forest lands would be allowed.

**Soil and Watershed** – Soils would be protected.

**Water** – Water quality would be protected.

**Recreation** – Dispersed recreation would be allowed, provided it did not interfere with the values present. Development of interpretive facilities would be allowed if it complimented the protective management status.

**Wildlife** – Wildlife habitat values would be maintained and protected.

**Cultural Resources** – Cultural resources would be protected or improved through management.

**Scenic Areas** – Scenic values would be protected.

**Minerals** – Lands would remain open to staking of mining claims. Surface occupancy restrictions would be placed on explorations.

### Excluded Uses

The following uses would not be allowed on protected areas:

**Coal** – Protected areas would not be suitable for coal leasing.

**Material Sales** – Sales of materials would not be allowed.

**Forest Products** – Intensive forest management would be excluded.

**Recreation** – Special recreation management areas or developed recreation sites that were unrelated to the protected resource would not be allowed.

**Realty Actions** – Major realty actions, such as linear rights-of-way, would be excluded.

**Community Expansion** – Significant values needing protection would not be foregone due to community expansion.

**Wilderness** – Protected areas would not be suitable for wilderness designation.

### SOILS

Sensitive watersheds where soil erosion problems exist because of steep slopes and/or fragile soils are shown as soil priority areas. Reducing soil loss and controlling erosion would be the priority for these lands. This could be accomplished through watershed improvement practices or management practices by other activities that would promote soil stability.

Other uses would be allowed to the extent they did not cause increased soil loss or erosion.

### Compatible Uses

Uses that could occur on soils priority lands are:

**Oil and Gas** – Lands would remain open to oil and gas leasing. Exploration and development activities

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would be restricted or limited so as not to cause increased soil erosion.

**Minerals** – Lands would remain open to location of mining claims. Exploration and development would be restricted so as not to cause increased soil erosion.

**Livestock Grazing** – Livestock grazing and range management would be allowed on these lands. Range management practices that promoted soil stability and reduced erosion would be stressed.

**Forest Products** – Timber harvest on fragile soils would be excluded; limited management of forest lands could be allowed. Management practices that reduced erosion and promoted soil stability would be stressed.

**Water** – Water quality would be protected and improved through management.

**Recreation** – Dispersed recreation would be allowed. Restrictions would be placed on some activities, including ORV use.

**Wildlife** – Critical habitats, including threatened and endangered species' habitats, would be protected. All wildlife habitats could be improved through management practices that promoted soil stability and reduced erosion.

**Cultural Resources** – Important cultural resources would be protected.

**Scenic Areas** – Limited protection would be provided for visually sensitive areas.

### Excluded Uses

The following uses would be excluded from fragile soil areas:

**Coal** – Soils priority lands would not be available for coal leasing.

**Material Sales** – Material sales requiring surface mining (sand and gravel) would not be allowed.

**Recreation** – Developed recreation sites would be excluded.

**Realty Actions** – Rights-of-way would not be allowed.

**Wilderness** – Soil priority areas would not meet the criteria for wilderness designation.

## WATER

Segments of streams located on public lands that are long enough to respond to Bureau-initiated management to enhance either water quality or fisheries, or both, are included in water priority areas. Water quality on these segments would be protected to maintain minimum state water quality standards. In some cases, management practices would be employed to improve water quality or fisheries.

## RECREATION

Public lands in recreation priority areas would be committed to special recreation management areas (SRMAs) or developed recreation sites. These would be areas where intensive management and investment would be required to maintain, protect, or enhance recreation opportunities.

Other uses would be allowed in these areas to the extent they did not interfere with recreation management objectives.

### Compatible Uses

Uses that could occur, subject to certain restrictions, are:

**Oil and Gas** – Lands would remain open to oil and gas leasing. No-surface-occupancy stipulations would be placed on oil and gas leases issued on developed recreation sites, primary river use sites along the upper Colorado River. The North Sand Hills recreation area is closed to oil and gas leasing.

**Minerals** – Lands would remain open to location of mining claims. The withdrawal would be retained on the North Sand Hills. Developed recreation sites would be appraised for their mineral potential and withdrawn from mineral entry, if necessary, to protect the public investment in facilities.

**Livestock Grazing** – Livestock grazing would be allowed but would be excluded on a site-specific basis from developed or intensively used recreation sites. Either intensive or limited management could occur.

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**Forest Products** – Harvesting of forest products would be allowed but would be excluded on a site-specific basis from existing and potential recreation sites within SRMAs and popular dispersed recreation sites (e.g., hunter camps). Either intensive or limited management could occur.

**Soils, Watershed and Water** – Soils, watershed, and water quality would be protected through limits or restrictions placed on location of recreation developments, certain types of recreation activities (e.g., ORVs), and other compatible uses.

**Wildlife** – Wildlife habitats, both aquatic and terrestrial, could be intensively managed for wildlife. Critical wildlife habitats, including threatened and endangered species habitats, would be protected by limits placed on the location of recreation developments, certain types of recreation activities, and other compatible uses (e.g., livestock grazing).

**Cultural Resources** – Significant cultural resources would be protected and, in certain cases, managed for their interpretive value.

**Major Realty Action** – Major actions such as rights-of-way would be allowed as long as visual contrast rating requirements could be met. Developed recreation sites would be avoided. Ownership consolidation would be allowed where it would help achieve recreation management objectives.

### Excluded Uses

The following uses would not be allowed within recreation priority areas:

**Coal** – Coal leasing would not be allowed.

**Material Sales** – No new material sales (sand and gravel) would be allowed.

**Wilderness** – Recreation priority lands would not be considered for wilderness designation.

**Community Expansion** – Recreation priority areas would not be suitable for the community expansion proposed in the various alternatives.

## WILDERNESS

Public lands which would be recommended as

suitable for designation by Congress as part of the National Wilderness Preservation System are shown in the wilderness priority area. As directed by Section 603(c) of FLPMA, public lands designated by Congress as wilderness would be managed under the provisions of the Wilderness Act, which also apply to national forest wilderness areas.

In general, wilderness areas would be devoted to recreational, scenic, scientific, educational, conservation, and historical use.

## PROHIBITED ACTIVITIES

Section 4(c) of the Wilderness Act prohibits certain activities:

“Except as specifically provided for in this Act, and subject to existing private rights, there shall be no commercial enterprise rights, there shall be no commercial enterprise and no permanent road within any wilderness areas designated by this Act and, except as necessary to meet minimum requirements for the administration of the area for the purpose of this Act (including measures required in emergencies involving the health and safety of persons within the area), there shall be no temporary road, no use of motor vehicles, motorized equipment or motorboats, no landing of aircraft, no other form of mechanical transport, and no structure or installation within any such area.”

Exceptions – Sections 4(c), and 4(d), and 5 of the Wilderness Act provide special exceptions to the prohibitions in section 4(c) by providing for the following:

1. Existing private rights.
2. Measures required in emergencies involving the health and safety of persons within the area.
3. Activities and structures that are the minimum necessary for the administration of the area as wilderness.
4. Use of aircraft and motorboats, where already established.
5. Measure necessary for the control of fire, insects, and diseases.

## DEFINITIONS FOR LAND USE

6. Any activity, including prospecting, for the purpose of gathering information about mineral or other resources if carried on in a manner compatible with the preservation of the wilderness environment. (This include mineral surveys conducted on a planned, recurring basis by the U.S. Geological Survey and Bureau of Mines).
7. Continued application of the U.S. mining and mineral leasing laws until December 31, 1983.
8. Water resource developments authorized by the President, where he determines that such use will better serve the interests of the United States and its people than will its denial.
9. Livestock grazing, where already established.
10. Commercial services necessary for activities which are proper for realizing the recreational or other wilderness purposes of the areas.
11. Adequate access to surrounded state owned and privately owned lands. If this cannot be provided, such lands are to be exchanged for federally owned lands.
12. Ingress and egress to surrounded valid mining claims and other valid occupancies.

In addition to the basic management authority in the Wilderness Act, management provisions may appear in the legislation establishing each wilderness area.

Specific policy guidance on wilderness management is contained in the BLM publication, *Wilderness Management Policy*, September, 1981.

## CULTURAL RESOURCES

Cultural resource priority areas contain significant prehistoric and historic cultural remains. The importance of these areas is judged according to criteria set forth in 36 CFR I 60, which deals with eligibility for the National Register of Historic Places (NRHP). Specifically, sites in priority areas are either on the NRHP or eligible/likely to be eligible for inclusion on the NRHP.

These significant areas (as well as other less significant sites) are guaranteed consideration under 36 CFR VIII 800: Protection of Historic and Cultural Properties. Procedures for protection include total or partial exclusion of all other uses, impact avoidance, further

research, interpretation, public information/education uses, and various levels of excavation, ranging from test to research to salvage.

## Compatible Uses

Uses that could occur, but may be subject to certain restrictions, are:

**Oil and Gas** - Lands would remain open to oil and gas leasing, with no-surface-occupancy stipulations being used to protect significant sites.

**Minerals** - Lands would remain open to location of mining claims. Emergency protective withdrawals would be used to protect significant areas from further mineral entry.

**Livestock Grazing** - Livestock grazing would be allowed, unless grazing or improvements directly and adversely impacted significant areas. Management intensity would then be limited.

**Forest Products** - Intensive or limited management of forest products would be allowed, but certain practices would be limited to protect cultural values.

**Soils, Watershed, and Water** - Management of these resource would be compatible with the protection and preservation of significant cultural sites.

**Wildlife** - Both aquatic and terrestrial wildlife habitats could be intensively managed for wildlife. Limits may be placed on types of management practices employed.

**Recreation** - Recreation uses could occur, although certain developments and dispersed forms of recreation (e.g., ORV use) would not be allowed. Significant sites would be interpreted for public information and education.

**Scenic Areas** - Management of scenic areas would be fully compatible with protection of cultural resources.

## Excluded Uses

The following uses would be excluded from the cultural resources priority areas:

**Coal** - Coal leasing would not be allowed.

## APPENDIX A

**Material Sales** – Sales of mineral materials, such as sand and gravel, would not be allowed.

**Realty Actions** – Major realty actions, such as rights-of-way, disposals, etc., would be excluded.

**Community Expansion** – Priority areas would not be available for community expansion.

**Wilderness** – Cultural sites in priority areas would not meet the criteria for wilderness designation.

**Livestock Grazing** – Livestock grazing would be allowed. Range improvement projects would be allowed, subject to meeting contrast rating requirements.

**Forest Products** – Harvesting of forest products, either under intensive or limited management, could occur as long as contrast rating requirements could be met.

**Soils, Watershed, and Water** – Management of these resources would be allowed. Any developments would have to meet contrast rating requirements.

**Wildlife** – Wildlife habitats, both aquatic and terrestrial, could be intensively managed by wildlife. Any development would have to meet contrast rating requirements.

**Cultural Resources** – Development and management of cultural resources would be allowed. Any interpretive facilities or excavations would be subject to meeting contrast rating requirements.

**Realty Actions** – Actions, such as powerline rights-of-way, would be allowed if contrast rating requirements could be met.

**Community Expansion** – Use of public lands for open space and parks would be allowed.

## VISUAL RESOURCES

Visual sensitive areas are included in visual resources priority lands. All such areas have been identified as Class II in the visual resource inventory on file in the Kremmling Resource Area Office. These are areas of special concern because of their inherent scenic value and/or sensitivity due to their location along major travel routes, such as highways and the upper Colorado River. Protection and maintenance of visual quality would be achieved through the imposition of restrictions on other resource uses or activities to reduce the degree of contrast with the surrounding landscape.

## Compatible Uses

Generally, all uses of the public lands can be made compatible with sensitive visual areas through one or more of the following measures:

1. Redesign of the project
2. Screening of buffering
3. Use of nonreflective paint materials
4. Rapid restoration and revegetation of surface disturbance

The following use would be compatible:

**Oil and Gas** – Lands would remain open to oil and gas leasing. No-surface-occupancy stipulations may be used to protect areas of high visibility.

**Minerals** – Lands would remain open to location of mining claims. Restrictions necessary to meet contrast rating requirements would be imposed.

## Excluded Uses

Uses that could not meet the criteria for Class II visual areas after application of mitigating measures would be excluded from sensitive visual areas. In addition, the following exclusions would apply:

**Coal** – Lands would not be considered for coal leasing.

**Wilderness** – Visual resource priority lands would not meet the criteria for wilderness designation.

**Mineral Materials** – The sale of mineral materials, such as sand and gravel, would be excluded.

## COMMUNITY EXPANSION

Federal lands suitable for the enhancement of state and local governmental units for community expansion and development purposes are included in community expansion priority areas. Lands would be

## DEFINITIONS FOR LAND USE

available through the Recreation and Public Purposes Act; direct sales; and exchanges and leases to locate schools, hospitals, parks, sanitary landfills, and similar facilities. Community expansion land parcels are within three miles of growing communities which are "land locked" by state and/or Federal lands. Priority would be given to processing request to use these land for community development and expansion purposes. Projects, such as water, sewer, electric, and road access rights-of-way, in support of community expansion would be encouraged.

Projects by other resources which detracted from the community development character of the land would be excluded.

### Compatible Uses

Uses that could occur prior to and during community development and expansion are:

**Oil and Gas** – Leasing and development of oil and gas resource would be allowed if it did not detract from community development character.

**Minerals** – Prior to disposal, all surface and subsurface minerals would have to be evaluated. Mineral reservation to the government would be considered on a case by case basis in disposals.

**Material Sales** – Material sales would be encouraged if they enhance community expansion needs.

**Livestock Grazing** – Livestock grazing would continue until disposal occurred. Permittees would have to be notified two years in advance prior to land disposal for adjustment of grazing privileges. Custodial management would be employed.

**Forest Products** – Timber harvesting would be allowed until lands were used for community expansion. Limited management would be employed.

**Soil and Watershed, Water, Threatened and Endangered Plants, and Wildlife Habitats** – Sensitive and/or critical elements of the environment would be protected prior to and during uses for community expansion as required by law. On-the-ground projects for wildlife improvement would have to be compatible with community expansion projects.

**Recreation** – Lands with recreation potential would be more suitable for management by local governments as part of community expansion.

**Cultural Resources** – Prior to development, cultural resources would be protected.

**Realty Actions** – Rights-of-way could be sited if they did not interfere with community expansion purposes.

### Excluded Uses

The following uses would not be allowed on lands used for community development and expansion:

**Coal** – Coal leasing development, or related rights-of-way that detracted from the value of lands for community expansion and development would not be allowed.

**Forest Products** – Investments in intensive forest management would not be made.

**Livestock Grazing** – Intensive management and large-scale range improvement projects that concentrated cattle near urban areas would not be allowed.

**Realty Action** – Large-scale, highly visible projects should be routed away from Federal lands adjacent to existing communities.

**Wilderness** – Community expansion lands would not meet the criteria for wilderness designation.

# **APPENDIX B: RANGELAND PROGRAM SUMMARY**

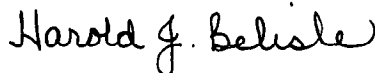
## **FOREWORD**

This document summarizes the Rangeland Management Program for the Kremmling Resource Area as presented in the recently completed Resource Management Plan. This publication is supplementary to the Record of Decision prepared for the entire Resource Management Plan & Environmental Impact Statement.

The benefits to be derived from the implementation of this program are within the concept of multiple use, maintaining a viable livestock industry and ensuring benefits for wildlife, and related resources as they exist on federal rangelands.

This document explains the process for implementation of the livestock grazing management program and the opportunities for additional public involvement. Periodic updates to this document will summarize actions taken and progress toward achieving planning objectives.

I appreciate the support and assistance given to the resource area from various groups, individuals, and local governments who have a vital interest in the management of these public lands.



Harold J. Belisle  
Area Manager  
Bureau of Land Management  
Kremmling Resource Area

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## **RANGELAND PROGRAM SUMMARY**

### **I. THE EXISTING GRAZING PROGRAM: AN INTRODUCTION**

Livestock grazing has been an important use of the public lands in the Kremmling Resource Area since the introduction of domestic livestock in the 1870s.

Presently, the resource area supports a domestic livestock grazing program on 356,260 acres, or 93 percent of the public lands within the resource area. Currently, these public ranges are licensed at a level of 45,648 animal unit months (AUMs) of forage.

The majority of the permitted public lands (95 percent) are grazed by cattle, which use 99 percent of the AUMs available. Sheep and horse grazing account for only one percent of the total authorized use and occur on only 5 percent of the public lands.

There are 162 term permits/leases on 311 allotments within the resource area. Seven of these allotments are common use areas, while the remainder are licensed for individual operator use.

At present, four allotments are intensively managed under allotment management plans (AMPs) that cover approximately four percent of the public lands (14,120 acres) and account for six percent of the total AUMs.

The remaining 307 allotments are less intensively managed and are licensed in accordance with the constraints of individual term permits/leases. The AUMs authorized on the term permits and leases were determined largely through a livestock forage production inventory conducted in 1953.

The majority of public lands are licensed for grazing use during various periods between May and October. This use, particularly in the spring, was established primarily to accommodate the needs of livestock operations. Spring use occurs on the lower benches and terraces and is designed to coincide with the end of calving. All calving is done on private hay meadows, and the cows and new calves are removed from the meadows to the public lands early in the spring which allows ranchers to begin early flood irrigation to raise hay for winter feeding.

The current cycle of continual spring use on public ranges has become very important for it affords the ranchers a suitable place to pasture their cows during the initiation of the irrigation season.

Present forage utilization on the public rangelands within the resource area accounts for 5.3% of the total

forage needs of the livestock industry in the Resource Area. Although this figure might seem low, this forage is provided at a very critical time of the year i.e., spring as explained above.

There is also a social and cultural significance to ranching. North Park and Middle Park are sparsely populated and agriculturally oriented. The major communities, Kremmling and Walden, are small and share common values and traditions. Many of the people have had ranching in their families for generations or have been around ranching all their lives. For the people in the Kremmling Resource Area, ranching is not just an industry but a way of life.

### **II. PROPOSED PLAN**

The proposed plan emphasizes the management, production, and use of renewable resources on the majority of the public lands in the Kremmling Resource Area. Multiple use management would be directed toward providing a flow of renewable resources from the public lands on a sustained yield basis.

In the Livestock Grazing Section of the proposed plan range forage would be allocated to optimize both livestock production and big game populations where possible. In grazing allotments where optimizing for both is not possible, livestock production would be favored, however, allocation of forage for big game would not be less than that needed to support the projected 1980 big game population levels.

The amount of forage estimated to be available for livestock and big game wildlife use is based on 1980 production survey estimates, condition class/estimated stocking rate surveys and monitoring studies conducted in conjunction with range users. At present the Kremmling Resource Area authorizes 45,648 AUM's of active livestock grazing use. Based on the estimates, surveys and studies mentioned above, it is estimated that 26,191 AUM's are needed to support big game populations (Rocky Mountain Elk, Mule Deer and Pronghorn Antelope) and that 39,726 AUM's are available for livestock grazing. In order to substantiate the proposed allocation for livestock grazing, a comprehensive rangeland monitoring program has been and will continue to be conducted in order check, refine and supplement the 1980 surveys. (See appendix 2 for detailed analysis of the Kremmling Resource Area Range Monitoring Plan.) Management

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decisions affecting the exact amount of grazing use will be made when monitoring data are sufficient to support these decisions.

In addition to forage allocation, all grazing allotments have been classified and placed into one of three management levels (Management Level 1, Management Level 2 or Management Level 3). This classification approach is based on the identification of allotments sharing similar resource characteristics, management needs and resource/economic potential for improvement. For each management level, recommendations have been made concerning the intensity of grazing management to be applied, multiple-use resource management objectives, range improvement needs, rangeland monitoring needs and other actions needed to either improve or maintain rangeland condition and productivity.

Management Level 1 allotments correspond to those areas where the objective is to maintain current satisfactory conditions. These allotments are currently producing at or near their forage potential, they do not have serious resource conflicts and do not usually have management problems. Twenty allotments have been placed under this management level which represents 13% of the public land in the Resource Area under grazing permit/lease.

Management Level 2 allotments correspond to those areas where the objective is to improve the current unsatisfactory forage production and condition. These allotments are either currently producing far less than their forage production potential, have significant resource conflicts or are managed at an inadequate level. Despite these resource problems/conflicts these allotments do provide opportunities for positive economic return from public investments. Seventy-six allotments have been placed under this management level which represents 51% of the public land in the Resource Area under grazing permit/lease.

Management Level 3 allotments correspond to those areas where the objective is to maintain the existing allotment situation and provide for management opportunities as needs arise with operators/other land use agencies. These allotments have a low forage production potential, minimal conflicting resource uses, or public lands that have been designated for disposal. Additionally, these allotments may have been leased for surface coal mining or will be designated for development and expansion to support the existing coal industry.

Two-hundred fifteen allotments have been placed under this management level which represents 36% of the public land under grazing permit/lease.

The management levels briefly described above determine priorities for increased management and funding. Management Level 2 allotments, having significant resource conflicts, problems and exhibiting positive management opportunities will have the highest priority for implementation and funding of intensive management, followed by Management Level 1 allotments then Level 3 allotments.

As situations, events or conditions change, allotments may be moved to a different management level to better correspond to their needs. Any such changes will be documented in RPS updates with appropriate explanations for the move.

Increased intensive grazing management will be implemented through development of allotment management plans (AMP's). The BLM will work closely with livestock operators, local wildlife officials, the local grazing advisory board and other individuals or organizations who have shown an interest in specific allotments. Each AMP will contain a grazing system that best suits the vegetation, soil, climate, kinds of animals that graze each allotment and the ranchers operational requirements. The AMPs will implement a minimum period of rest from livestock grazing for each allotment and will minimize adverse environmental impacts and resource conflicts. Priority for AMP development and implementation, as stated earlier, will be directed first to Management Level 2 allotments, followed by Management Level 1 allotments then Management Level 3 allotments. Appendix 1 shows allotments by priority for AMP development and implementation.

In order to fully implement each AMP, there are a number of rangeland improvement projects proposed. These projects are necessary to facilitate livestock management and improve vegetation health and vigor, thereby providing a stable base of forage for livestock and wildlife. Each project will undergo a site-specific Environmental Assessment and will be designed to reduce the impacts of their construction on the surrounding environment

The proposed projects are subject to change as more site-specific information is gathered during AMP development. Additionally, range improvements may be added, deleted or modified as a result of the consultation process with the livestock operators during the development of AMPs.

## RANGELAND PROGRAM SUMMARY

Provided that all proposed management opportunities are undertaken in this plan, it is expected that available livestock forage would be increased over the long term (20 years). This expected increase would be from the initial proposed level of 39,726 AUM's to 54,296 AUM's which represents a 37% increase from the proposed initial allocation or a 19% increase from the existing authorization. In addition, the percent of rangeland in satisfactory condition would be expected to increase from the existing 20% to 70%.

### III. THE ALTERNATIVES

There were an array of alternatives considered in developing the final Kremmling Resource Management Plan/Environmental Impact Statement. The final Proposed Plan was created from a combination of several of these alternatives. The alternatives considered in addition to the Proposed Plan are listed and summarized below:

- Continuation of Present Management
- Energy-Minerals
- Economic Benefit
- Renewable Resource
- Recreation
- Natural Environment

#### Continuation of Present Management Alternative

This alternative would not change the existing grazing management program or livestock forage allocations.

#### Energy-Mineral Alternative

In this alternative forage would be allocated to optimize livestock production while allocating forage to sustain big game populations at only half of their present (1980) levels. Forage would be initially allocated as follows:

Livestock: 52,652 AUMs

Big game (Rocky Mountain elk, mule deer, and pronghorn antelope): 13,150 AUMs.

Four grazing allotments would continue to be managed under existing allotment management plans (AMPs). These allotments cover approximately four percent (14,120 acres) of the public lands and account

for 1,621 total AUMs (as adjusted from the range condition inventory/monitoring studies). The construction and maintenance of range improvements would continue as a priority to meet the range, wildlife, and watershed objectives outlined in the AMPs. Monitoring studies would also continue as a priority in evaluating the effectiveness of the plans.

The remaining 307 grazing allotments in the resource area would remain under non-intensive management, licensed under the constraints of existing individual term permits and leases. Requested changes in permits, such as changes in season of use or class of livestock and adjustments in percent Federal range, would be considered on an individual basis. The construction of new range improvement projects would be authorized on a case-by-case basis, with priority given to those that would enhance grazing distribution.

#### Economic Benefit Alternative

Under this alternative forage would be allocated to optimize livestock production while allocating forage to sustain big game populations at only half of their present (1980) levels. The initial forage allocations would be as follows:

Livestock: 52,652 AUMs

Big game (Rocky Mountain elk, mule deer, and pronghorn antelope): 13,150 AUMs.

In addition to forage allocation, all grazing allotments would be intensively managed. Intensive management is defined here as selecting or classifying grazing allotments for management under one of three levels. The number of allotments occurring within each level of management would be:

Level	Number of Allotments
1 (Maintain)	11
	(Satisfactory Forage Condition)
2 (Improve)	63
	(Unsatisfactory Forage Condition)
3 (Custodial)	237
	(Small, Unconsolidated Allotments or Allotments Given Priority for Other Land Uses)

The 63 allotments that would be in Management

## APPENDIX B

Level 2 fall within the range priority use zones identified on the Economic Benefit Alternative Map. These allotments comprise approximately 160,038 acres (or 45 percent of the public land under permit) and have been targeted to receive priority for increased management in order to improve forage production and condition. Under this alternative, the overall effects of increased management would result in a long-term increase in forage production to a level of 65,531 AUMs and bring approximately 65 percent of the permitted public lands into satisfactory condition.

### Renewable Resource Alternative

In this alternative range forage would be allocated to optimize both livestock production and big game populations where feasible. In grazing allotments where optimizing both was not possible, livestock production would be favored, while providing sufficient forage to support present (1980) big game populations. The initial forage allocations would be as follows:

Livestock: 39,726 AUMs

Big game (Rocky Mountain elk, mule deer, and pronghorn antelope): 26,191 AUMs.

In addition to forage allocation, all grazing allotments would be intensively managed. Intensive management is defined here as selecting or classifying grazing allotments for management under one of three levels as follows:

Level	Number of Allotments
1 (Maintain)	20 (Satisfactory Forage Condition)
2 (Improve)	81 (Unsatisfactory Forage Condition)
3 (Custodial)	210 (Small, Unconsolidated Allotments or Allotments Given Priority for Other Land Uses)

The 81 allotments that would be in management level 2 fall within the range priority use zones identified on the Renewable Resources Alternative Map. These allotments comprise approximately 195,946 acres (or 55 percent of the public land under permit) and have been targeted to receive priority for increased

management to improve forage production and condition. Under this alternative, the overall effects of increased management would result in a long-term increase in forage production to a level of 55,404 AUMs and bring approximately 75 percent of the permitted public lands into satisfactory condition.

### Recreation Alternative

Under this alternative range forage would be allocated to exceed projected needs of optimum big game populations as determined by the Colorado Division of Wildlife, with the balance of available forage allocated for livestock. The initial forage allocations would be as follows:

Livestock: 31,305 AUMs

Big game (Rocky Mountain elk, mule deer, and pronghorn antelope): 34,368 AUMs.

In addition to forage allocation, all grazing allotments would be intensively managed. Intensive management is defined here as selecting or classifying grazing allotments for management under one of three levels. The number of allotments occurring within each level of management would be:

Level	Number of Allotments
1 (Maintain)	20 (Satisfactory Forage Condition)
2 (Improve)	81 (Unsatisfactory Forage Condition)
3 (Custodial)	210 (Small, Unconsolidated Allotments or Allotments Given Priority for Other Land Uses)

Vegetation manipulations would be allowed in these as well as in all other grazing allotments, provided they were compatible with other favored resource programs, such as terrestrial and aquatic habitat management. Under this alternative, the overall effects of increased management would be a long-term increase in forage production to a level of 47,404 AUMs and approximately 75 percent of the permitted public lands being brought into satisfactory condition.

## RANGELAND PROGRAM SUMMARY

### Natural Environment Alternative

Under this alternative range forage would be allocated to exceed projected needs of optimum big game populations as determined by the Colorado Division of Wildlife, with the balance of available forage allocated for livestock. The initial allocations would be as follows:

Livestock: 31,305 AUMs

Big game (Rocky Mountain elk, mule deer, and pronghorn antelope): 34,368 AUMs.

In addition to forage allocation, all grazing allotments would be intensively managed. Intensive management is defined here as selecting or classifying grazing allotments for management under one of three levels. The number of allotments occurring within each level of management would be:

Level	Number of Allotments
1 (Maintain)	20 (Satisfactory Forage Condition)
2 (Improve)	81 (Unsatisfactory Forage Condition)
3 (Custodial)	210 (Small, Unconsolidated Allotments or Allotments Given Priority for Other Land Uses)

The 81 allotments that would be in management level 2 comprise approximately 195,946 acres (or 55 percent of the public land under permit) and have been targeted to receive priority for increased management to improve forage production and condition. Most intensive range management practices would be allowed in these, as well as, all other grazing allotments, provided they were compatible with other favored resource programs, such as terrestrial and aquatic habitat management. However, prescribed burning would be the only type of vegetation manipulation permitted since it would be most compatible with the natural setting. Under this alternative, the overall effects of increased management would be a long-term increase in forage production to a level of 47,404

AUMs and approximately 75 percent of the permitted public lands being brought into satisfactory condition.

## IV. PUBLIC INVOLVEMENT

### A. Identifying the Issues

When the Kremmling Resource Management Plan/EIS was initiated in early 1980 a major effort was undertaken to involve the public in identifying critical management issues and concerns within the Resource Area. Grazing permittees and lessees were contacted by phone, as well as, invited to voice their concerns at three public meetings held in Kremmling, Walden and Golden on February 20th, 21st, and 26th, 1980 respectively.

As a result of these meetings two major issues surfaced regarding the management and allocation of livestock use on public lands in the Resource Area. These issues were summarized in the form of two planning questions:

1. How should BLM allocate forage to provide for the needs of the livestock industry?
2. What needs to be done to provide needed range improvement projects for grazing allotments?

### B. Selecting the Proposed Plan

As development of the Resource Management Plan/EIS progressed a proposed plan was selected that clearly "focused in" on the two planning issue questions.

The plan identified grazing management as a priority resource program in the Area, emphasizing a balanced allocation of forage resources and targeting a group of priority allotments to receive intensive management (range improvement development). During this formulation process the ranching community and public were kept informed about planning progress through five newsletter updates. Additionally, briefings on the planning process were given to the Middle Park and North Park Stockgrowers, as well as, the Craig District Grazing Advisory Board.

Upon completion of the draft Resource Management Plan/EIS three open house meetings and three

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public hearings were scheduled to solicit public comments. These were scheduled as follows:

### Open House

Kremmling - March 15, 1983  
Walden - March 16, 1983  
Golden - March 17, 1983

### Public Hearings

Kremmling - April 12, 1983  
Walden - April 13, 1983  
Golden - April 14, 1983

After the public comment period on the draft document closed on May 15, 1983 there appeared to be a major point of contention that was raised by several interested groups. Concern had been expressed that the various alternatives did not have a wide enough spread in the levels of forage allocation for livestock/wildlife. To address this concern the Final Resource Management Plan/EIS presented for public comment in May of 1984 provided a wider range in livestock/big game forage allocation among the various alternatives. The expected resource impacts from these broadened allocation levels were thoroughly discussed in the EIS portion of the final document.

### C. Consultation/Coordination: An On-Going Process

Comprehensive resource management planning is a continuing, dynamic process requiring almost continuous public involvement and coordination, especially with land users that are directly affected by land use decisions. In order to exchange information and insure participation in the process all livestock permittees/lessees will be contacted prior to the 1) issuance of any proposed decision affecting changes in their permit/lease, and 2) development of Allotment Management Plans specific to their area.

## V. IMPLEMENTATION

The proposed plan is to be implemented primarily over a ten year period, but the long-range resource benefits are expected to far exceed this period.

Mutual agreements and decisions implementing changes in livestock use in the Kremmling Resource

Area will be rendered within five years following the publication of the *Final Kremmling Resource Management Plan (RMP)*. Forage allocations made in these mutual agreements or decisions may vary from the allocations published in this document. The differences may be the result of grazing monitoring studies conducted before or during the five year period that provide additional resource information as to the proper stocking level of an allotment. Additionally, consultations with permittees may reveal information on grazing use, distribution and range improvement that was previously unknown and should be considered in the allocation of forage.

### A. Administrative Actions

With the completion of the Kremmling RMP in May of 1984 a Record of Decision and Rangeland Program Summary (this document) was prepared for the area. This document, which was completed in October of 1984, shall provide public information on objectives and decisions for all rangeland uses, and set forth those decisions that affect livestock grazing on each allotment. This document shall serve as a supplemental information document on the grazing program for the Record of Decision.

Following the completion of the RPS, a consultation period with permittees and other affected parties will commence. These consultations will include a discussion of proposed allotment actions, the sequence of grazing adjustments or decisions and AMP's.

Approximately a year after the publication of the RPS the first rangeland program summary update shall be prepared. The update shall summarize the actions being proposed to achieve the land use planning objectives and to implement the land use planning decisions, and show any mutual agreements that have been reached and decisions issued. Additional RPS updates will be issued at various intervals, to report on progress achieved since the first RPS update and to show any modifications to mutual agreement or decision by the Area Manager. The decisions in the RPS and the RPS updates are not protestable. However, individuals or groups may submit written comments on the RPS or RPS updates concerning specific allotments. The individual or group will then receive a copy of any decision or mutual agreement implementing the RMP decisions.

From October 1, 1984, to September 30, 1989, the Area Manager will enter into mutual agreements with

## **RANGELAND PROGRAM SUMMARY**

permittees or issue grazing decisions adjusting grazing use. Each mutual agreement and decision will contain the following:

1. Reason for the action including reference to the pertinent conditions and/or provisions of the grazing regulations.
2. The recognized grazing preference.
3. The allocation of forage to livestock.
4. The specific schedule for implementing the adjustments.
5. The specific management objectives for the allotment.
6. The resource values to be evaluated to determine progress in meeting these objectives.
7. The changes in these values that would warrant a modification of the scheduled adjustments and other information necessary to set forth actions required to achieve the required management objectives for the allotment.
8. Other information necessary to set forth actions required to achieve the required management objectives for the allotment (ie...proposed changes in season of use, livestock kind/class or percent federal range, as well as, proposed combination of allotments to consolidate management opportunities).
9. The operators rights to protest and/or appeal decisions if formal decisions are issued.

Decisions and mutual agreements will adjust livestock use in three increments over a five year period with increments occurring in years one, three and five unless otherwise agreed by the BLM and the permittee.

### **B. Rangeland Improvements**

The following improvements will be necessary to implement grazing management and achieve the objectives in this program. The improvements will be constructed primarily on management level 2 allotments.

Fences	66 miles
Spring Developments	20
Stock Reservoirs/Pits	46
Wells	14
Ditches	4 miles
Pipelines	18 miles
Vegetation Manipulation	33,500 acres
Reseeding	11,700 acres

The total cost of new projects will be \$854,300. An additional cost of implementation will be \$150,000 for project reconstruction.

The exact amount and number of range improvements will be identified as allotment management plans are developed.

### **C. Grazing Use Adjustments**

The proposed allocation for livestock use in the RMP is 39,726 AUM's. This is a reduction from the 45,648 presently authorized. The grazing adjustments will primarily take place in the level 1 and 2 category allotments. Sixteen of the twenty level 1 allotments have been identified for increases. Fifty-two of the seventy-six level 2 allotments have been identified for decreases and sixteen of the level 2 allotments have been identified for increases. These grazing adjustments, however, may be changed as a result of monitoring studies done before and during the five year study period following the completion of the RMP.

### **D. Appropriations**

Development of range improvement facilities and grazing management systems will be based on budget appropriations, and the rate of development will be subject to changes in future budget appropriations.

Not all range improvement project work will be dependent on federal funding/revenues. During the consultation period permittees/lessees will be asked for contributive funding (labor or materials) for range developments. Where other benefiting resources, such as wildlife, would be involved, project cost sharing will be explored with participating agencies such as the Colorado Division of Wildlife.

## **APPENDIX B**

### **E. Benefit/Cost Analysis**

The Bureau's Rangeland Improvement Policy emphasizes that range improvements shall be placed where they are most needed and where they will achieve the greatest resource benefits with the least expenditure of public funds. To meet this objective the group of priority grazing allotments identified for resource improvement (Level 1 and 2) have been analyzed through a Benefit/Cost computer model known as SageRam. This model allows for the cost or investment proposals to be evaluated against the expected value of resource benefits for each allotment. This Benefit/Cost information is then considered with other factors such as the permittees willingness to contribute and range condition in ranking the allotments for implementation. The proposed ranking of allotments is then reviewed by the District Grazing Advisory Board and a final ranking is completed. The final ranking of allotments for implementation is contained in Appendix 1.

### **VI. EXPECTED ENVIRONMENTAL IMPACTS**

The environmental impacts from implementing the proposed plan are discussed in Chapter IV of the Final Kremmling Resource Management Plan/EIS.

In summary there are no significant adverse impacts

expected from implementing the range program as outlined in the proposed plan. There would be a net beneficial impact to the soil, watershed and vegetation resources provided that all or a portion of the 76 grazing allotments (51% of the Resource Area) are intensified under grazing management as proposed. A net improvement in big game wildlife forage and habitat is also expected from the intensification of range management and improvement practices. However, because of the substantial amount of vegetation manipulation proposed careful layout, design and application of brush removal will be required. Consultation with the Colorado Division of Wildlife will be necessary to insure that big game requirements are met and that other game or non game species will not be adversely impacted.

Other important resources in the Kremmling Resource Area such as the recreation, cultural and forestry programs will not be significantly impacted by the range development activities proposed.

The overall effects of increased management would result in a long term increase in livestock forage production to a level of 54,296 AUMs with approximately 70% of the permitted public lands being brought into satisfactory condition.

Over the long term (20 years) the consolidation and implementation of management opportunities proposed under this program is expected to provide a stable, renewable base of available range forage, lending to the stability of the livestock industry in the Kremmling Resource Area.

## APPENDIX 1

### PROPOSED LIVESTOCK USE AND ALLOTMENT IMPLEMENTATION SUMMARY

Acres Allot. No.	Present Public Land	Authorized Livestock Use AUM's	Proposed Initial Livestock Use AUM's	Expected Long-Term Livestock Use AUM's	Management Level	Implementation Priority
*7503	513	93	66	168	2	
*7506	7,722	362	1,023	1,423	2	
*7008	1,651	105	105	105	2	
*7009	171	60	60	60	2	2
*7032	2,830	250	218	526	2	
7568	6,741	1,600	999	1,280	2	3
7253	3,876	782	220	786	2	4
*7002	1,729	200	186	261	2	
*7003	3,089	336	476	602	2	5
*7004	2,743	266	383	544	2	
7505	4,251	532	656	847	2	6
*7081	1,179	225	109	283	2	
*7082	949	107	66	138	2	
7541	2,977	486	576	627	2	8
*7018	1,952	514	119	308	2	
*7020	9,527	1,164	898	1,430	2	
7766	1,477	182	149	349	2	10
*7084	2,174	237	220	414	2	11
7552	1,057	149	123	277	2	12
*7014	3,079	200	114	288	2	
*7016	1,733	143	61	217	2	
*7540	1,264	211	145	268	2	
*7765	1,075	118	101	236	2	
*7103	1,239	190	149	254	2	
*7105	1,450	194	143	234	2	
7569	1,381	113	122	377	2	16
*7139	1,667	184	144	410	2	
*7141	1,813	267	177	364	2	
*7142	1,117	186	123	188	2	17
*7143	482	67	25	90	2	
*7144	274	74	24	49	2	
7560	2,077	420	331	411	2	18
7256	3,357	297	219	670	2	19
7254	4,859	364	255	455	2	20
7096	6,816	795	652	1,207	2	21
*7500	3,314	351	433	991	2	
*7534	1,055	69	86	115	2	

## APPENDIX 1

### Rangeland Program Summary Appendix 1—Continued

Acres Allot. No.	Present Public Land	Authorized Livestock Use AUM's	Proposed Initial Livestock Use AUM's	Expected Long-Term Livestock Use AUM's	Management Level	Implementation Priority
7054	1,009	150	67	158	2	23
7537	5,726	307	514	919	2	24
7574	2,095	179	203	383	2	25
7119	2,246	259	170	440	2	26
7250	4,563	803	362	716	2	27
7110	1,552	242	147	242	2	28
7754	2,268	414	373	522	2	29
*7187	1,506	75	150	217	2	
*7133	2,857	329	239	673	2	
7252	1,726	185	79	257	2	31
*7542	986	250	170	321	2	
*7767	372	64	63	102	2	
7507	5,504	582	652	1,152	2	33
7588	3,982	350	332	332	2	34
7565	6,470	380	366	606	2	35
*7087	513	54	30	77	2	
*7164	690	172	84	120	2	
7255	2,443	198	164	297	2	37
7093	2,945	210	310	623	2	38
*7523	520	20	20	20	2	
*7527	5,580	470	553	914	2	
*7511	4,914	238	224	569	2	
*7589	160	20	20	20	2	
7510	2,506	252	273	512	2	41
7107	1,612	472	156	409	2	42
7192	2,366	457	245	344	2	43
7551	1,288	141	87	179	2	44
7191	1,720	242	55	364	2	45
7189	1,589	160	92	198	2	46
7258	2,602	209	156	280	2	47
7120	1,914	200	60	255	2	48
7136	1,381	232	96	278	2	49

# PROPOSED LIVESTOCK USE AND ALLOTMENT IMPLEMENTATION SUMMARY

## Rangeland Program Summary Appendix 1—Continued

Acres Allot. No.	Present Authorized Public Land Livestock Use AUM's	Proposed Initial Livestock Use AUM's	Expected Long-Term Livestock Use AUM's	Management Level	Implementation Priority
7545	1,238	303	303	2	50
7783	760	102	102	2	51
7046	441	70	38	2	52
7579	4,032	345	417	2	53
7100	560	100	36	2	54
*7151	836	25	81	2	
*7155	250	10	24	2	
*7064	918	91	113	1	
*7065	2,429	231	335	1	
*7015	15,408	200	1,140	1	
*7017	2,442	240	283	1	2
*7019	804	176	135	1	
*7044	3,519	565	456	1	
*7045	1,016	90	138	1	
7116	2,319	268	315	1	4
*7172	2,089	100	291	1	
*7175	2,312	150	315	1	
7051	2,502	258	337	1	6
7073	1,424	229	188	1	7
7501	899	152	156	1	8
7534	1,055	69	86	1	9
7550	1,370	63	157	1	10
7553	1,883	236	256	1	11
7562	1,048	241	253	1	12
7585	1,400	144	157	1	13
7769	1,105	14	14	1	14
7080	6,073	816	382	3	1
7023	4,122	423	256	3	2
7010	2,326	565	157	3	3
7031	3,129	262	189	3	4
7053	593	102	44	3	5
7057	812	111	60	3	6

# APPENDIX 1

## Rangeland Program Summary Appendix 1—Continued

Acres Allot. No.	Present Public Land	Authorized Livestock Use AUM's	Proposed Initial Livestock Use AUM's	Expected Long-Term Livestock Use AUM's	Management Level	Implementation Priority
7058	1,014	159	48	48	3	7
7168	964	131	69	69	3	8
7169	1,361	114	87	87	3	9
7135	2,334	336	150	150	3	10
7001	718	100	75	75	3	11
7011	120	30	30	30	3	12
7012	640	93	93	93	3	13
7013	632	74	74	74	3	14
7021	654	116	66	66	3	15
7022	286	44	23	23	3	16
7024	536	100	40	40	3	17
7025	856	67	53	53	3	18
7026	72	2	5	5	3	19
7027	36	5	8	8	3	20
7028	126	37	12	12	3	21
7030	1,103	118	97	97	3	22
7033	160	64	64	64	3	23
7034	153	25	11	11	3	24
7035	120	20	20	20	3	25
7036	120	38	38	38	3	26
7037	129	22	9	9	3	27
7038	846	312	312	312	3	28
7039	36	126	126	126	3	29
7040	278	18	19	19	3	30
7041	262	10	19	19	3	31
7042	80	27	14	14	3	32
7043	557	84	39	39	3	33
7047	77	14	9	9	3	34
7048	191	90	90	90	3	35

# PROPOSED LIVESTOCK USE AND ALLOTMENT IMPLEMENTATION SUMMARY

## Rangeland Program Summary Appendix 1—Continued

Acres Allot. No.	Present Public Land	Authorized Livestock Use AUM's	Proposed Initial Livestock Use AUM's	Expected Long-Term Livestock Use AUM's	Management Level	Implementation Priority
7049	322	27	25	25	3	36
7050	552	59	46	46	3	37
7052	317	16	21	21	3	38
7055	526	75	36	36	3	39
7056	177	23	20	20	3	40
7058	1,014	159	48	48	3	41
7059	35	10	3	3	3	42
7060	878	93	77	77	3	43
7061	188	49	49	49	3	44
7062	102	18	17	17	3	45
7063	1,036	110	152	152	3	46
7066	858	170	170	170	3	47
7067	874	174	174	174	3	48
7068	450	170	86	86	3	49
7069	80	29	29	29	3	50
7070	55	31	31	31	3	51
7071	334	224	224	224	3	52
7072	258	30	37	37	3	53
7074	12	74	74	74	3	54
7075	46	4	1	1	3	55
7077	96	43	25	25	3	56
7078	520	27	27	27	3	57
7079	1,023	137	96	96	3	58
7083	780	150	150	150	3	59
7085	194	47	44	44	3	60
7086	159	50	25	25	3	61
7088	137	12	7	7	3	62
7089	397	126	126	126	3	63
7090	400	49	49	49	3	64

## APPENDIX 1

### Rangeland Program Summary Appendix 1—Continued

Acres Allot. No.	Present Public Land	Authorized Livestock Use AUM's	Proposed Initial Livestock Use AUM's	Expected Long-Term Livestock Use AUM's	Management Level	Implementation Priority
7091	315	35	35	35	3	65
7092	1,237	149	149	149	3	66
7094	48	80	19	19	3	67
7095	110	19	19	19	3	68
7097	106	8	6	6	3	69
7098	418	62	41	41	3	70
7099	50	24	16	16	3	71
7101	127	37	17	17	3	72
7102	516	48	35	35	3	73
7104	240	27	36	36	3	74
7106	141	175	61	61	3	75
7108	205	38	25	25	3	76
7109	431	88	88	88	3	77
7111	1,036	455	455	455	3	78
7112	730	65	65	65	3	79
7113	120	9	9	9	3	80
7114	520	12	12	12	3	81
7115	1,232	306	306	306	3	82
7117	55	7	7	7	3	83
7118	191	39	18	18	3	84
7121	404	48	41	41	3	85
7122	40	6	6	6	3	86
7123	219	102	102	102	3	87
7124	370	134	134	134	3	88
7125	245	52	30	30	3	89
7126	104	9	15	15	3	90
7127	110	23	23	23	3	91
7128	330	51	51	51	3	92
7129	180	36	36	36	3	93

# PROPOSED LIVESTOCK USE AND ALLOTMENT IMPLEMENTATION SUMMARY

## Rangeland Program Summary Appendix 1—Continued

Acres Allot. No.	Public Land	Present Authorized Livestock Use AUM's	Proposed Initial Livestock Use AUM's	Expected Long-Term Livestock Use AUM's	Management Level	Implementation Priority
7130	159	65	65	65	3	94
7131	741	180	180	180	3	95
7134	475	53	51	51	3	96
7137	332	70	30	30	3	97
7138	236	20	20	20	3	98
7140	520	125	125	125	3	99
7145	246	74	12	12	3	100
7146	160	36	36	36	3	101
7147	178	27	18	18	3	102
7148	195	27	23	23	3	103
7149	127	24	21	21	3	104
7150	1,011	175	102	102	3	105
7152	466	312	109	109	3	106
7153	240	77	77	77	3	107
7154	80	35	35	35	3	108
7156	422	31	44	44	3	109
7157	624	134	53	53	3	110
7158	104	64	11	11	3	111
7159	2,610	809	809	809	3	112
7160	349	113	30	30	3	113
7161	475	117	133	133	3	114
7162	906	192	43	43	3	115
7163	749	83	70	70	3	116
7165	39	3	3	3	3	117
7166	322	39	28	28	3	118
7167	1,240	78	78	78	3	119
7170	328	10	20	20	3	120
7171	279	45	19	19	3	121
7173	420	37	42	42	3	122

## APPENDIX 1

### Rangeland Program Summary Appendix 1—Continued

Acres Allot. No.	Public Land	Present Authorized Livestock Use AUM's	Proposed Initial Livestock Use AUM's	Expected Long-Term Livestock Use AUM's	Management Level	Implementation Priority
7174	238	19	26	26	3	123
7176	60	11	11	11	3	124
7177	93	6	6	6	3	125
7178	206	40	40	40	3	126
7179	453	48	33	33	3	127
7180	59	142	142	142	3	128
7181	108	45	45	45	3	129
7182	160	53	53	53	3	130
7183	625	113	113	113	3	131
7184	270	29	29	29	3	132
7185	240	80	80	80	3	133
7186	234	68	68	68	3	134
7188	94	27	18	18	3	135
7190	90	60	60	60	3	136
7193	317	101	63	63	3	137
7194	120	50	50	50	3	138
7195	80	41	41	41	3	139
7196	120	66	66	66	3	140
7197	180	84	84	84	3	141
7198	60	97	97	97	3	142
7199	190	26	19	19	3	143
7251	40	10	10	10	3	144
7257	2,500	95	145	145	3	145
7259	120	12	12	12	3	146
7260	887	227	46	46	3	147
7261	500	124	124	124	3	148
7502	828	177	128	128	3	149
7504	1,237	340	116	116	3	150
7508	355	59	61	61	3	151

# PROPOSED LIVESTOCK USE AND ALLOTMENT IMPLEMENTATION SUMMARY

## Rangeland Program Summary Appendix 1—Continued

Acres Allot. No.	Present Public Land	Authorized Livestock Use AUM's	Proposed Initial Livestock Use AUM's	Expected Long-Term Livestock Use AUM's	Management Level	Implementation Priority
7512	324	60	46	46	3	152
7513	68	3	3	3	3	153
7515	387	90	50	50	3	154
7519	314	18	18	18	3	155
7520	148	48	48	48	3	156
7521	437	44	44	44	3	157
7522	5,240	225	225	225	3	158
7524	1,280	120	120	120	3	159
7525	803	145	145	145	3	160
7526	120	30	30	30	3	161
7528	80	12	12	12	3	162
7529	1,440	98	98	98	3	163
7530	789	105	105	105	3	164
7532	403	24	24	24	3	165
7533	839	225	225	225	3	166
7535	1,750	171	137	137	3	167
7536	3,627	720	720	720	3	168
7538	2,264	268	268	268	3	169
7539	589	97	97	97	3	170
7544	88	7	7	7	3	171
7546	873	75	76	76	3	172
7547	727	113	97	97	3	173
7556	3,536	295	295	295	3	174
7557	234	59	40	40	3	175
7558	2,426	611	597	597	3	176
7559	80	10	10	10	3	177
7561	4,097	518	503	503	3	178
7563	712	61	59	59	3	179
7564	654	87	98	98	3	180

# APPENDIX 1

## Rangeland Program Summary Appendix 1—Continued

Acres Allot. No.	Present Public Land	Authorized Livestock Use AUM's	Proposed Initial Livestock Use AUM's	Expected Long-Term Livestock Use AUM's	Management Level	Implementation Priority
7566	47	88	88	88	3	181
7573	2,526	184	184	184	3	182
7576	85	20	20	20	3	183
7577	975	120	106	106	3	184
7581	120	22	22	22	3	185
7582	200	44	44	44	3	186
7583	612	112	85	85	3	187
7584	330	16	32	32	3	188
7586	48	12	12	12	3	189
7587	509	83	78	78	3	190
7750	481	49	49	49	3	191
7751	767	60	65	65	3	192
7752	40	4	4	4	3	193
7753	360	24	24	24	3	194
7755	600	120	120	120	3	195
7757	265	40	40	40	3	196
7758	550	113	99	99	3	197
7760	676	70	78	78	3	198
7762	1,368	149	142	142	3	199
7763	440	57	57	57	3	200
7764	342	51	40	40	3	201
7770	760	84	84	84	3	202
7775	1,040	173	173	173	3	203
7776	80	7	7	7	3	204
7777	280	24	24	24	3	205
7778	820	135	127	127	3	206
7780	40	6	6	6	3	207
7781	223	38	38	38	3	208
7782	78	6	6	6	3	209

# PROPOSED LIVESTOCK USE AND ALLOTMENT IMPLEMENTATION SUMMARY

## Rangeland Program Summary Appendix 1—Continued

Acres Allot. No.	Present Public Land	Authorized Livestock Use AUM's	Proposed Initial Livestock Use AUM's	Expected Long-Term Livestock Use AUM's	Management Level	Implementation Priority
7784	996	108	108	108	3	210
7785	120	20	20	20	3	211
7005	218	32	26	26	3	212
7006	88	14	9	9	3	213
7007	12	1	1	1	3	214
7029	160	17	17	17	3	215

\* = Groups of allotments that will be combined to form one allotment.

## APPENDIX 2

### KREMMLING RESOURCE AREA RANGE MONITORING PLAN

#### I. INTRODUCTION

The Kremmling Resource Area is located in north central Colorado and consists of 1,222,880 acres, 33 percent is public land. Included are Jackson, and Grand counties and portions of Eagle, Larimer, and Summit counties. See Kremmling Resource Area Final RMP/EIS Chapter 1 for maps and more information on the resource area.

##### A. Purpose

The purpose of this monitoring plan is to measure (1) the progress towards achieving allotment objectives, and (2) factors that affect this progress, such as utilization and climate.

##### B. Coordination

###### 1. Other Resource Management

Other resource specialists such as Wildlife Biologist, Hydrologist, Foresters, etc., will be consulted about the location and type of range studies established. Data obtained from these studies will be available for their use.

###### 2. Permittees

The permittees/lessees will be encouraged to participate in the monitoring studies made on their allotments. Also, when the allotment is evaluated, the results will be shared with the permittee. Involvement of the permittee in monitoring and evaluation of the allotment will improve the permittee's understanding of the process. Improved cooperation between the permittee and BLM should result.

##### C. Physical Description

Physical description of the resource area is covered

in the Kremmling Resource Area Final RMP/EIS Chapter 2.

##### D. Wildlife

Descriptions of the species inhabiting the resource area and their environment can be found in the Kremmling Resource Area Final RMP/EIS Chapter 2. Important big game species include antelope, deer and elk. Sage grouse are very common.

#### II. MANAGEMENT OBJECTIVES

General management objectives are stated in the Kremmling Resource Area Final RMP/EIS Chapter 3 under the title, Management Prescription Categories, Livestock Grazing. Also stated are the kinds of monitoring to be conducted under each objective. Basically, there are three levels of management with one objective for each level. Types of monitoring to be used are described in this plan in Sections V and VI.

##### MANAGEMENT LEVEL 1

Objective - To maintain or improve forage production in grazing allotments that are currently in satisfactory condition.

Monitoring - Allotments warranting an increase in stocking rates.

- Collection of actual use, utilization, climatic, and trend. Trend only on allotments as management plans are developed.

- Allotments not warranting an increase in stocking rates.

- Compliance checks to ensure adherence to annual grazing authorization.

## APPENDIX 2

### MANAGEMENT LEVEL 2

**Objective** – To improve the forage production and condition in grazing allotments that are currently in unsatisfactory condition. Improve allotment condition to meet Level 1 standards.

**Monitoring** – Collection of actual use, utilization and climatic data. Trend data as management plans are developed.

### MANAGEMENT LEVEL 3

**Objective** – To maintain the existing allotment situation and provide for management opportunities as needs arise for operators and other land use agencies.

**Monitoring** – Conduct periodic compliance checks to ensure adherence to annual grazing authorizations.

## III. MONITORING PRIORITIES

### A. First Level

Begins at the present and lasts until the five-year grazing decisions which will be issued as a result of the resource management plan have been finalized and the initial stocking rates set.

#### 1. Priority #1

Utilization and actual use will be conducted on Management Level 2 allotments which are receiving adjustments in grazing allocation.

#### 2. Priority #2

Utilization and actual use data to be gathered on all Management Level 2 allotments.

#### 3. Priority #3

Establish and read trend studies on Management Level 2 allotments for which AMPs are being prepared. Continue photographing photo trend plots on existing AMPs.

### B. Second Level

This level of priority will begin after stocking rates have been established and AMPs are being implemented.

#### 1. Priority #1

Establishment and reading of trend studies on Management Level 2 allotments for which AMPs are being prepared.

#### 2. Priority #2

Continuation of utilization studies on Management Level 2 allotments.

#### 3. Priority #3

Continuation of trend studies on AMPs that have already been implemented.

#### 4. Priority #4

Establish and/or read trend studies on Management Level 1 allotments.

## IV. CONSTRAINTS ON THE MONITORING PROGRAM

This monitoring plan will be implemented subject to the following constraints:

A. Studies will be implemented subject to limits on manpower and funding.

B. Intensity of public controversy or resource conflicts will be considered.

C. Specific components will be monitored where they have the most importance to the management concept for each allotment.

## V. STUDY METHODS

### A. Existing Studies

#### 1. Utilization – Key Forage Species Method

See BLM Manual 4430 Monitoring Studies 4430.47C. See appendix A for form to be used.

## RANGE MONITORING PLAN

### a. Modification

This method has been modified by adding utilization cages to each area where utilization transects are conducted. These cages are used to develop ocular estimates to compare the grazed to the ungrazed key vegetative species. By comparing the key species outside the cage to the key species inside the cage, the degree of utilization can be more accurately estimated. A photographic record will also be made by photographing the grazed area and the caged area. After the study is completed, the cage will be relocated within the key area.

### b. Analysis & Computation

An utilization overlay has been constructed for each allotment being monitored. The overlay divides the allotment into stratum. Each strata represents a portion of the allotment and its boundaries are determined by topography and distance to water. Within each stratum a key area is located. The grazing use on the key area is representative of the use within the stratum. Utilization studies are conducted on the key area.

While conducting the utilization studies, if any discrepancies are noted between the boundaries of the strata and actual utilization patterns in the allotment, the utilization overlay will be corrected. Also, the computation of utilization will be adjusted for the allotment.

This data, along with actual use, will be used to evaluate the allotments for overall utilization and distribution of livestock.

The following example shows how the utilization studies in each key area will be used to compute the utilization on the allotment:

Example: Allotment 7200

Key Area 1  
50% Production  
50% Utilization

Key Area 2  
35% Production  
40% Utilization

Key Area 3  
15% Production  
60% Utilization

*Analyses:* From the utilization data and estimates of production for each key area, overall allotment utilization can be estimated.

Example: % Utilization  $\times$  % Production =

Key Area #1       $50\% \times 50\% = .25$

Key Area #2       $40\% \times 35\% = .14$

Key Area #3       $60\% \times 15\% = .09$   
100% = .48

$.48 \times 100\% = 48\%$  overall allotment utilization

### c. Justification for Retaining the Study

The Key-Forage Plant method will be retained for the following reasons:

1. The method is already established. Data already obtained can be used in determining proper use levels, reducing the time needed to collect data for this purpose.
2. This method takes a minimum amount of time and only one person is needed to establish and perform the study.
3. This method of utilization has been challenged in court and has been accepted as a proper method to be used.
4. This method is not extremely technical, can be easily explained and learned, and does not require much training. Results between individual examiners are generally consistent.

### 2. Photo Trend

This method has been in the Kremmling Resource Area for many years. See BLM Manual 4430 Monitoring Studies 4430.56A. See Appendix B for correct form to be used.

#### a. Modification

This study was originally established as 5'x5' plots. Some of the plots are now 3'x3'. In the

## APPENDIX 2

future, these studies will only be photographed. Photos will be taken in the rest pasture annually. If there is no rest pasture in the allotment, all studies will be photographed no more often than once each cycle of the plan. Reading the plot (collecting data) will be at the option of the study examiner.

### b. Justification for Retention of Study

The photo trend method should be kept for the following reasons.

1. Since the method is already established, the only cost involved will be a small amount of time, film and film processing.
2. It is the only long-term data we will have on record.
3. The photographs have been taken over the years and provide good documentation of the range condition, especially the overview photograph.

### c. Analysis of Data

These studies will be used for long term data only. The photos will give us indications of trend. They will not be used exclusively for trend determination but in conjunction with other trend studies to be established.

## 3. Actual Use

- a. See BLM Manual Section 4430.3 for information on actual use studies. See Appendix C for form to use.

Actual use data involving the level two allotments will be gathered by sending out actual use forms for the previous grazing season to each permittee. A stipulation requiring the submission of actual use data within 15 days after the grazing season has been made a condition of the permits/leases for these allotments. Data may also be gathered by telephone.

- b. Counting (See BLM Manual Section 4430.39B1) will be used to verify actual use reports. See Appendix D for form to be used.

### c. Analysis of Data

Actual use reports and livestock counts will be used with utilization, trend and climate for allotment evaluation.

## 4. Climatological Studies

Two types of climatological data will be collected; precipitation data collected in the field by the BLM and temperature and precipitation data from National Oceanic and Atmospheric Administration. Precipitation data will also be obtained from USGS Geological Survey.

Climatological studies are covered in BLM Manual Section 4430.6.

### a. Precipitation

Rain gauges have been located in several allotments in the resource area. There are eight in North Park Planning Unit and five in Middle Park Planning Unit. More may be established in the future as the need arises. The tru-check wedge shaped gauge is used. Readings are made monthly from May through September.

Precipitation data for the Williams Draw area in North Park is obtained from USGS Geological Survey Water Resources Division.

### b. Temperature

Temperatures are obtained only from official weather stations, Walden and Spicer. The data comes from National Oceanic and Atmospheric Administration.

### c. Analysis of Data

See BLM Manual Section 4413.21D for instructions on interpretation and evaluation. Data will be recorded in the allotment file, and in a climatological file located in the allotment file drawer. Average growing season temperature and precipitation will be recorded on the Allotment Evaluation Summary (Form, 4413-1) in the allotment file. See Appendix E for form being used.

# RANGE MONITORING PLAN

## VI. NEW STUDY METHODS

There will be two new types of trend studies established in the Kremmling Resource Area:

1. Canopy Coverage Method (Daubennire),
2. Quadrat Frequency Method

These trend study methods are described in the Rangeland Inventory, Monitoring, and Evaluation Draft Manual, sections 4430.560 and 4430.56F, respectfully.

The trend studies will be analyzed using four different criteria (1) composition of key plant species, (2) vegetation cover, (3) vigor, and (4) soil stability. A short narrative will be written evaluating the changes in these criteria from the previous study. A determination will be made whether the trend is upward, static, or downward.

## VII. STUDY LOCATIONS

### A. Utilization

1. Key Areas

Allotments are stratified into key areas by knowing the livestock grazing patterns, topography, vegetation, and distance from water for each area of the allotment.

Key areas are portions of an allotment which, because of location, grazing and browsing value, and/or use, serve as an indicative sample of utilization and trend. Key areas may be considered as the "pulse" of the rangeland. These areas guide the management of the entire area which they represent. A key area is normally a significant unit of rangeland located on an area used by livestock or wildlife, is a representative sample of the suitable seasonal rangeland areas, is also a representative sample of a small area having important grazing value, is grazed each year that the allotment or pasture is used, and is capable of showing utilization and trend.

2. Study Sites

The study sites will be selected by range staff of the Kremmling Resource Area familiar with the allotment and the livestock operation. These

study sites will correspond with the key vegetation areas of each allotment. The permittee will be asked for his suggestions on study locations.

### B. Identification of Location

The location of both utilization and trend studies will be identified by orange flagging.

## III. DATA RECORDS

Utilization and trend records will be contained within an allotment six-way folder. The first leaf will contain an allotment map and utilization overlay. Leaf two will contain the utilization evaluation and cage location. Leaf three will contain actual use, livestock counts, and climatic data. Leaf four will contain trend forms, completed utilization forms and the allotment evaluation summary. Leaf five will contain the AMP, if and when one is written. Leaf six will contain a consultation/coordination section in which all discussions would be documented between BLM and the permittee concerning monitoring studies and grazing use adjustments. Also, any other remarks will be filed here.

## IX. STUDY SCHEDULES

Utilization studies will be completed no later than two weeks following the last grazing date in the allotment/pasture where the study is located.

### A. Trend

The trend studies will be done from June through September.

### B. Progress Reporting

Progress reporting will be done twice a year, once during mid-year review and at the end of the fiscal year on September 30.

## X. KEY AREA AND ALLOTMENT EVALUATION

Allotment evaluations will consist of analyzing

## **APPENDIX 2**

changes in trend over time and the reasons for these changes. These evaluations will be in a narrative form and will use data from trend analysis, utilization studies, climatic data, actual use information and range conservationist's field observations. See Appendix F for allotment evaluation summary form.

The final evaluation will determine if the management system on each allotment is achieving the proper management objectives. If the objectives are not being met a determination as to the validity of the objectives

will be made. If the objectives are valid, changes in management based on the data gathered will be discussed.

### **XI. TRAINING FOR MONITORING**

Training for the different phases of the monitoring program will be done on a yearly basis at the beginning of each field season by the Supervisory Range Conservationist.

Form 4412-12  
(April 1966)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RANGE UTILIZATION  
KEY FORAGE PLANT METHOD

District		Date	Examiner
Planning Unit		Allotment	Pasture
Vegetation Type		Class of Stock	
Season of Use		Grazing Management System	
Transect Location			

CLASS		KEY SPECIES					
INTERVAL	INTERVAL MIDPOINT  (x)	Species		Species		Species	
		FREQUENCY (f)	(f) × (x)	FREQUENCY (f)	(f) × (x)	FREQUENCY (f)	(f) × (x)
Slight 0 – 20	10						
Light 21 – 40	30						
Moderate 41 – 60	50						
Heavy 61 – 80	70						
Severe 81 – 100	90						
TOTAL							
Average = $\frac{\sum fx}{\sum f}$ *							
Utilization							

Remarks (Use back of sheet if necessary)

\* Where f = the frequency or number of observations within each class interval (f column), x = the class interval midpoint (x column), and  $\sum$  = the summation symbol

District RPS Exhibit B

## Resource Area

Date and Time

Examiner

NUMBER

ALLOTMENT

### PLOT

## SPECIES

## GRASS

FORB

BROWSE

## MATURE PLANTS

## FEEDLINGS

/16 UNITS

TOTAL SQ.  
INCHES

**MATURE  
PLANTS**

## FEEDLINGS

/16 UNITS

INCHES

**MATURE PLANTS**

## FEEDLINGS

/16 UNITS

INCHES

## PLANTS

\_\_\_\_\_

TOTAL SQ.

**MATURE**

FEEDING INCS

/16 UNITS

TOTAL SQ.  
INCHES

LITTER

LITTER

LITTER

LITTER

LITTER

PART II - SUMMARY OF PLOT DATA						PART III - PLOT DIAGRAM			
LIST BY SPECIES (a)	NUMBER		1/16 SQ. FT. UNITS (estimate) (d)	TOTAL SQ. IN. (measurement) (e)	PERCENT				
	MATURE PLANTS (b)	SEED-LINGS (c)			COVER (f)	COMPOSITION (g)			
Grasses (Basal Cover)									
TOTAL									
Forbs (Basal Cover)									
TOTAL									
Browse (Foliage Cover)									
TOTAL									
Litter									
PLOT TOTAL									

PART IV - TREND INDEX SUMMARY	
Composition, Key Species (percent)	
Cover, Live Vegetation (percent)	
Seedlings, Key Species (number)	
Litter, Plot Total (percent)	
TOTAL	

### GENERAL INSTRUCTIONS

Print one legible copy in field for *each* trend plot. File with *Range Trend Plot Location Data* (Form 4412-24) and photographs (see *Bureau Manual 4115*).

### SPECIFIC INSTRUCTIONS

(Items not listed are self-explanatory)

#### PART I - PLOT DATA BY SQUARE FOOT SECTION

Record data for each 1' x 1' section of the plot

Column (a) - Use four letter plant symbol

Columns (b) & (c) - Enter number

Column (d) - *Estimate* - 1/16 sq. feet units covered by specie

Column (e) - *Measure* - Total sq. inches covered by specie

*Note:* Use *either* estimate or measurement for *each* species. Do not use both.

Total - Total data for *each* specie and enter (Part - II)

#### PART II - SUMMARY OF PLOT DATA

Column (e) - *Measurement* -  $\frac{\text{Measured sq inches (Column (e))}}{1296 (3' \times 3' \text{ plot}) \text{ or } 3600 (5' \times 5' \text{ plot})} \times 100 = \text{cover}$

Column (f) - *Estimate* - Multiply Column (d) by 0.7 (3' x 3' plot) or 0.25 (5' x 5' plot)

Column (g) - *Composition* -  $\frac{\text{Cover (Column (f)) of specie}}{\text{Total cover (of plot in Column (f))}} \times 100 = \text{percent composition}$

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB NO. 1004-0051  
Expires: January 31, 1986

## ACTUAL GRAZING USE REPORT

Dear Sir:

In accordance with the terms and conditions of the permit or lease which authorizes your grazing use, please complete this form and return to the \_\_\_\_\_ Resource Area Office within 15 days after completing your authorized grazing use (43 CFR 4120.2-2(d), 4120.2-3(e), and 4130.5-1(e)). This information, along with other studies data, is needed to evaluate the effectiveness of present management. Use a separate line for every day that you either turn livestock in or take livestock out of an allotment or pasture. Your cooperation in providing accurate information will be appreciated.

[illegible]

I CERTIFY That this is a complete and accurate report of my grazing use.

Signature of Permittee/Leassee

Date \_\_\_\_\_

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious, or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on reverse)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
CERTIFICATE OF LIVESTOCK COUNT

District

Date \_\_\_\_\_

**INSTRUCTIONS** - District Office prepares original for livestock trespass file or allotment actual use file, as necessary.

Time: ☐ a.m. ☐ p.m.

**1. Name of operator**

**Address (include zip code)**

**2. Describe lands on which livestock are counted**

### 3. Class of livestock counted

**SHEEP**

## CATTLE

## Yearlings

## Weaners

## Ewes

## Cows

## Rams

## Bulls

Other

**Other**

TOTAL SHEEP

TOTAL CATTLE

## Horses

## Goats

#### 4. AUs counted

### 5. Brands of operator

Remarks

**I CONCUR**

Counted by \_\_\_\_\_ (Signature)

(Signature of Operator or Representative)

**(Title)**

Form 4413-1  
(July 1968)UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

District

Planning Unit

Date

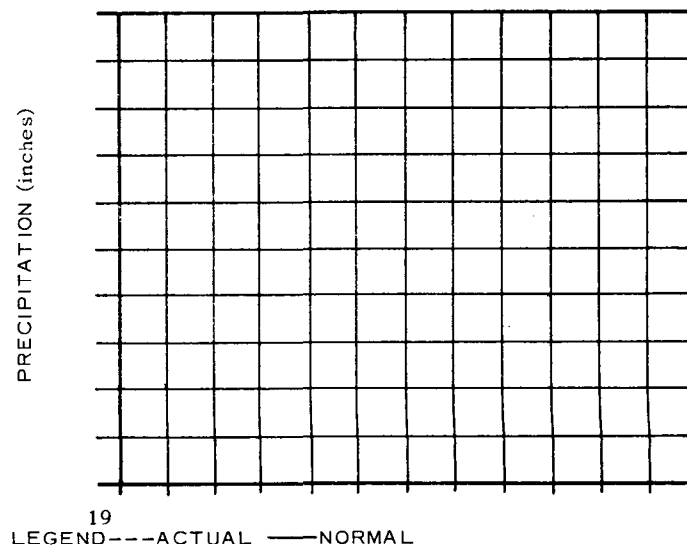
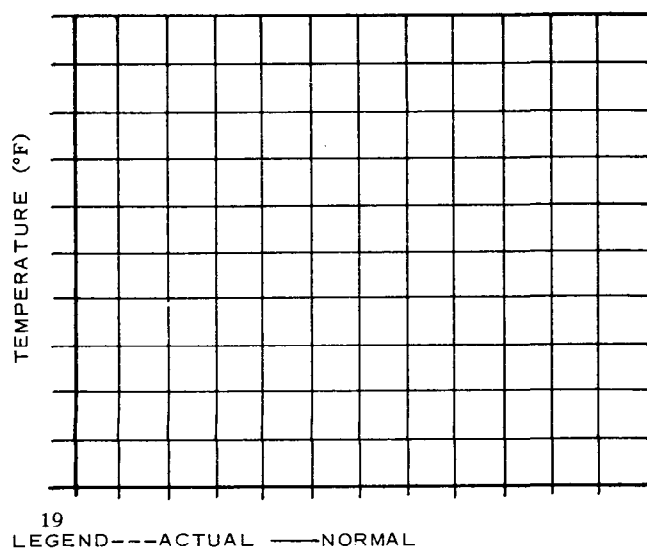
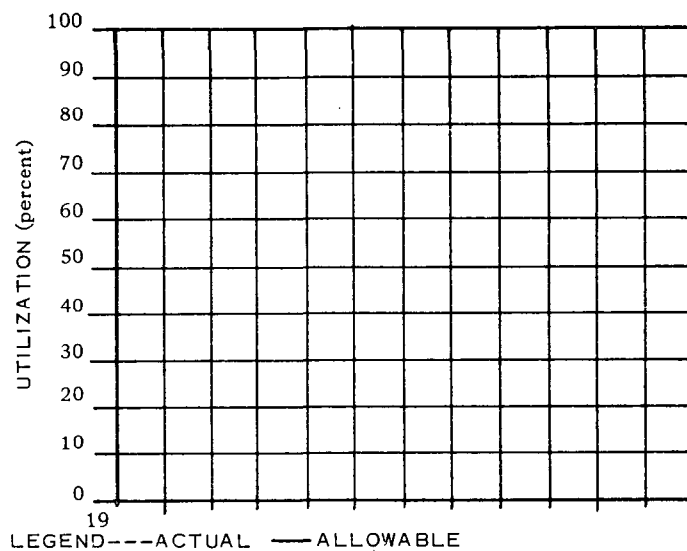
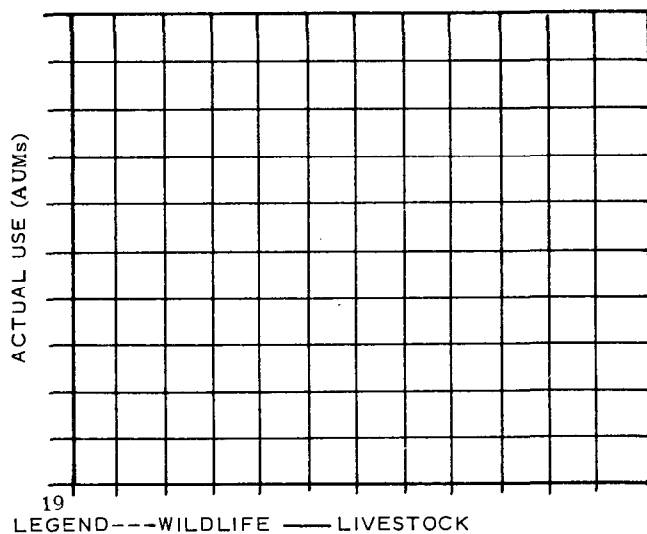
## ALLOTMENT EVALUATION SUMMARY

Allotment

Type of Management

## TREND INDEX

100			



PRODUCTION		RANGE SUITABILITY		
Current	AUMs	PERCENT		
		SUITABLE	POTENTIALLY SUITABLE	UNSUITABLE
Potential	AUMs			

## NARRATIVE

Brief concise evaluation, alternative possibilities for improvement, recommendations for management changes, etc.  
*(Attach additional sheets, if necessary)*

# APPENDIX C

## OWNERSHIP CONSOLIDATION – LAND TENURE ADJUSTMENT

The Kremmling Resource Area's Resource Management Plan/Environmental Impact Statement (RMP/EIS) has identified the following parcels of land for various disposal actions. These parcels have undergone preliminary multiple-resource and impact analysis. A site-specific Land Report/Environmental Assessment will be prepared for each parcel in the event of its disposal.

The Bureau would process, initiate, and favor action for consolidation of ownership where overall land management would be improved. This could include boundary adjustments between State and Federal agencies; blocking of land patterns, including private, state, public, and other Federal lands; and resolution of split mineral estates. No acreage limitations would be placed on such actions.

Land consideration for acquisition would include:

1. Inholdings of private, state, or other Federal land within large blocks of public lands.
2. Land adjacent to intensively managed tracts of public land where overall program management would be enhanced, such as lands adjacent to special recreation management areas, intensively managed forest sites, grazing allotments, or important mineral areas.
3. Lands of mineral importance where the Federal minerals are overlain by state or public surface ownership.

Public lands considered suitable for disposal would be:

1. Tracts in the Grand Lake, Granby, and Fraser areas that would support or enhance their recreational and tourism based economy
2. Inholdings within large blocks of state or other Federal lands
3. Public lands adjacent to large blocks of state or other Federal lands that would be best managed by that agency
4. Public lands overlying other mineral estates (state minerals, public surface)
5. Isolated tracts that:

- a. Have no important wildlife habitat values (winter range, nesting areas, mating areas, etc.)
- b. Are not within a sensitive watershed or riparian area
- c. Are in areas where Bureau initiated range management opportunities are limited because of size, isolation, and site potential
- d. Are lands where Bureau initiated forest management opportunities are limited because of tract size, stand size, access difficulties, or adverse sites
- e. Have no resource values of major significance

Areas near or adjacent to the towns of Kremmling and Granby have been identified for community expansion. These lands would be available through sale, exchange, lease, grant or patent to meet the development needs of these communities.

Disposal Categories:

Category I. Public lands suitable for retention in public ownership and needed for multiple-use management which will not be considered for sale. Except as noted all public lands are Category I.

Category I: Special Exceptions: Category I lands are described above. Adjustments that are in the public interest and would benefit federal or other governmental agencies' management programs would be considered. Exchanges, boundary adjustments, Recreation and Public Purposes leases, and Section 302 leases are such exceptions.

Category I: State Indemnity Selection Parcels. The Colorado State Board of Land Commissioners has selected lands to satisfy their entitlement under Section 7 of the Statehood Act of March 3, 1875.

Category II: Public lands which will be considered for sale or other disposal.

## APPENDIX C

### OWNERSHIP CONSOLIDATION - LAND TENURE ADJUSTMENT

County	Township	Range	Section	Lot/Subdivision	Acres	Disposal Category
Larimer	12N	74W	28	NE1/4	160	II
	12N	75W	22	Lot 4	40.55	II
	"	"	26	SE1/4	160	II
	12N	76W	32	E1/2NW1/4	80	II
	11N	76W	18	Lots 1, 2	79.73	II
	11N	77W	01	NE1/4SE1/4	40	II
Jackson	12N	80W	27	S1/2SE1/4, NE1/4SE1/4,SE1/4NE1/4	160	I:Special Exception (USDA-FS)
	"	"	34	NE1/4NE1/4	40	II
	"	"	27	NW1/4SW1/4,SW1/4NW1/4	80	II
	"	"	32	NE1/4NW1/4	40	II
	12N	82W	26	S1/2SW1/4,SW1/4SE1/4	120	II
	11N	79W	02	Lots 5, 6	56.74	II
	"	"	32	E1/2NW1/4	80	II
	"	"	18	Lots 1, 2	79.73	II
	"	"	14	SW1/4SW1/4,		
	"	"	15	SE1/4SE1/4,		
	"	"	22	NE1/4NE1/4	120	II
	"	"	15	NW1/4,N1/2SW1/4	240	II
	"	"	20	NW1/4NE1/4	40	II
	"	"	11	E1/2SE1/4	80	II
	"	"	14	NE1/4NE1/4	40	II
	"	"	17	Lot 1	18.11	II
	"	"	14	S1/2SE1/4	80	II
	"	"	23	NW1/4NE1/4	40	II
	"	"	30	NE1/4NE1/4	40	II
	11N	80W	11	SE1/4NE1/4,NE1/4SE1/4	80	II
	11N	81W	26	NE1/4SW1/4SE1/4	10	II
	"	"	26	SW1/4SW1/4SE1/4	10	II
	10N	78W	07	Lot 3	38.75	II
	"	"	18	NE1/4SE1/4	40	II
	"	"	21	NE1/4SE1/4	40	I:Special Exception (State)
	10N	79W	03	S1/2SE1/4	80	II
	"	"	12	NE1/4SE1/4	40	II
	10N	80W	01	SW1/4NE1/4	40	II
	10N	81W	20	NE1/4SE1/4	40	II
	10N	82W	01	Lot 4, SW1/4NW1/4, W1/2SW1/4	160.52	II
	"	"	12	NW1/4NW1/4	40	II
	9N	77W	19	SW1/4SE1/4	40	II
	"	"	29	W1/2NW1/4,NW1/4SW1/4,		
	"	"	30	SE1/4NE1/4,NE1/4SE1/4	200	II
	"	"	31	E1/2NE1/4,		
	"	"	32	SW1/4NW1/4	120	II
	9N	81W	15	S1/2SW1/4	80	II
	"	"	19	NW1/4SE1/4	40	II
	9N	82W	13	SE1/4NW1/4	40	II
	"	"	24	S1/2NW1/4,NW1/4NW1/4	120	II
	"	"	35	N1/2NE1/4	80	II
	"	"	35	W1/2SW1/4	80	II
	8N	77W	04	SE1/4SW1/4	40	II
	"	"	05	NW1/4SW1/4	40	II
	"	"	06	SW1/4NE1/4	40	II
	"	"	06	NE1/4SW1/4	40	II
	8N	81W	02	SE1/4SE1/4	40	II

# OWNERSHIP CONSOLIDATION

County	Township	Range	Section	Lot/Subdivision	Acres	Disposal Category
Jackson	8N	81W	25	SE1/4,SE1/4NE1/4,		
(Cont.)	"	"		E1/2SE1/4,SW1/4SW1/4	320	II
	"	"	26	NW1/4SE1/4	40	II
	"	"	33	SE1/4SW1/4	40	II
	8N	80W	31	Lot 3	35.97	II
	"	"	31	Lot 4	35.99	II
	"	"	31	NE1/4SW1/4	40	II
	8N	82W	02	Lot 5	44.58	II
	"	"	02	Lot 6	43.81	II
	7N	78W	09	SE1/4SE1/4	40	II
	"	"	10	SE1/4NE1/4	40	II
	"	"	12	SW1/4SW1/4	40	II
	"	"	13	N1/2SE1/4	80	II
	"	"	23	NE1/4NE1/4	40	II
	"	"	23	S1/2SE1/4,E1/2SW1/4	160	II
	"	"	25	S1/2NW1/4	80	II
	7N	79W	19	SE1/4SW1/4	40	II
	7N	81W	30	Lot 4, E1/2SW1/4	114.79	II
	7N	82W	14	NE1/4SW1/4	40	II
	"	"	22	SW1/4NE1/4	40	II
	"	"	23	NW1/4NE1/4	40	II
	"	"	25	NE1/4,SE1/4NW1/4	200	II
	"	"	26	SE1/4SW1/4	40	II
	"	"	35	N1/2SE1/4	80	II
	6N	78W	29	SE1/4NW1/4	40	II
	6N	79W	07	E1/2NE1/4	80	II
	"	"	08	SW1/4SW1/4	40	II
	"	"	21	NE1/4NE1/4	40	II
	"	"	21	SW1/4SW1/4	40	II
	"	"	22	SE1/4SE1/4	40	II
	"	"	22	S1/2NE1/4	80	II
	"	"	22	NE1/4SW1/4	40	II
	"	"	23	SW1/4SW1/4	40	II
	"	"	23	SW1/4NW1/4	40	II
	6N	80W	09	SW1/4SW1/4	40	II
	"	"	22	W1/2NW1/4	80	II
	"	"	22	NE1/4NW1/4	40	II
	"	"	22	NW1/4SW1/4	40	II
	"	"	10	SW1/4SE1/4	40	II
	"	"	13	NE1/4SW1/4	40	II
	"	"	13	NW1/4NW1/4	40	II
	"	"	15	NW1/4SE1/4	40	II
	"	"	17	SE1/4NE1/4	40	II
	"	"	18	Lot 5	28.98	II
	"	"	19	Lots 5, 6	53.76	II
	"	"	21	SE1/4SW1/4	40	II
	"	"	26	NW1/4NE1/4	40	II
	"	"	27	NE1/4NW1/4	40	II
	"	"	19	Lots 5, 6		
	"	"	30	Lot 5	66.79	II
	"	"	31	SE1/4SE1/4	40	II
	6N	81W	18	Lot 4	35.65	I:Special Exception (State)
	"	"	24	SW1/4NE1/4	40	II
	6N	82W	01	SW1/4NE1/4	40	II
	"	"	12	SE1/4NE1/4,NE1/4SE1/4	40	II
	"	"	23	N1/2NE1/4,SE1/4NE1/4	120	I:Special Exception (State)
	"	"	34	NW1/4NW1/4	40	II
	"	"	35	S1/2SW1/4	80	II
	5N	78W	01	NE1/4SE1/4	40	II
	"	"	08	W1/2SE1/4, SW1/4NE1/4,SE1/4NW1/4	160	II

# APPENDIX C

County	Township	Range	Section	Lot/Subdivision	Acres	Disposal Category
Jackson	"	"	09	SE1/4SW1/4	40	I:Special Exception (State)
(Cont.)	"	"	17	SE1/4NE1/4	40	I:Special Exception (State)
Grand	5N	80W	08	SW1/4SW1/4	40	II
	5N	81W	21	Lots 1, 3,		
	"	"	22	Lot 4	140.69	II
	"	"	22	Lot 2	46.29	II
	"	"	30	Lot 9	45.06	II
	"	"	31	Lot 20	46.02	II
	5N	82W	14	NW1/4SW1/4	40	II
	"	"	25	Lot 10	45.11	II
	4N	81W	05	Lot 3	46.67	II
	"	"	07	Lot 3	39.19	II
	"	"	07	Lot 4	39.06	II
	"	"	10	NE1/4,E1/2,SE1/4	240	II
	"	"	22	NW1/4NE1/4	40	I:Special Exception (State)
	"	"	29	NW1/4NW1/4	40	I:Special Exception (State)
	"	"	32	NE1/4,W1/2NE1/4, W1/2SE1/4	320	I:Special Exception (State)
	"	"	34	W1/2NW1/4,NW1/4SW1/4	120	I:Special Exception (State)
	4N	82W	13	NW1/4SW1/4	40	I:Special Exception (State)
	"	"	14	NW1/4NW1/4,		
	"	"	15	N1/2NE1/4	120	I:Special Exception (State)
	3N	76W	11	W1/2NW1/4	80	II
	"	"	22	Lot 10	2.65	II
	"	"	22	Lot 16	2.65	II
	"	"	30	Lot 4, SW1/4SE1/4	77.16	II
	3N	77W	25	S1/2SW1/4,SW1/4SE1/4	120	II
	"	"	26	NW1/4NE1/4,NW1/4,		
	"	"	27	E1/2NE1/4,SE1/4SW1/4, E1/2SE1/4SW1/4, N1/2SE1/4,SW1/4SE1/4,		
	"	"	34	NE1/4NE1/4NW1/4, S1/2NE1/4NW1/4, N1/2SE1/4NW1/4	280	II
	"	"	34	NW1/4SW1/4	40	II
	"	"	35	SW1/4SE1/4	40	II
	3N	79W	31	Lot 2	36.28	I:Special Exception (State)
	3N	80W	16	Lots 1, 2, 3, 4	22.80	II
	"	"	17	Part Lot 4	8.92	II
	"	"	17	Lot 5	5.72	II
	"	"	21	N1/2NE1/4	80	II
	3N	81W	03	E1/2SE1/4	80	II
	"	"	10	NE1/4NW1/4	40	II
	"	"	11	NW1/4NW1/4	40	II
	"	"	17	SW1/4NW1/4	40	II
	"	"	18	Lots 3, 4	82.41	II
	"	"	29	SE1/4NE1/4	40	II
	3N	82W	01	Lots 5, 6, 7, 8, 9	177.96	I:Special Exception (State)
	"	"	12	Lots 1, 2, 3, 4, 5	166.34	II
	"	"	13	TR 41	80	II
	"	"	13	Lots 1, 2, 3, 4	152.27	II
	"	"	24	Lot 1	38.08	II
	"	"	24	Lots 2, 3, 4	113.76	II
	"	"	25	Lots 1, 2, 3, 6	151.36	II
	"	"	26	Lot 1	24.59	II
	"	"	36	Lots 1, 4, 5, 11	157.92	II
	"	"	25	Lots 4, 5	4.76	II
	"	"	35	Lots 2, 3	5.88	II
	2N	76W	25	SW1/4SE1/4	40	II
	"	"	22	S1/2NE1/4,N1/2SE1/4,		
	"	"	23	SW1/4NE1/4,S1/2NW1/4, N1/2SW1/4,SE1/4SW1/4,		

# OWNERSHIP CONSOLIDATION

County	Township	Range	Section	Lot/Subdivision	Acres	Disposal Category
Grand (Cont.)	"	"	25	SE1/4	560	II
	"	"	26	W1/2SW1/4,		
	"	"		E1/2SE1/4	160	II
	2N	79W	18	E1/2SE1/4	80	II
	"	"	34	SE1/4NW1/4	40	II
	2N	80W	25	NE1/4NW1/4	40	II
	2N	80W	25	SE1/4NW1/4,E1/2SW1/4,		
	"	"		SW1/4SW1/4	160	II
	"	"	35	NE1/4NE1/4	40	II
	2N	81W	05	Lot 9	38.77	II
	"	"	05	Lots 11, 12	78.45	II
	1N	76W	04	Lots 5, 6, 7, 8, 9	160.76	II
	"	"	05	N1/2SE1/4,SE1/4SE1/4	120	I:Special Exception (Exchange, etc.)
	"	"	08	NE1/4,N1/2SE1/4,		
	"	"		SE1/4SE1/4	280	I:Special Exception (Exchange, etc.)
	"	"	17	E1/2NE1/4,SE1/4,		
	"	"		E1/2SW1/4	320	II
	"	"	20	NE1/4NW1/4	40	II
	"	"	08	W1/2NW1/4,		
	"	"	07	E1/2E1/2SE1/4NE1/4,		
	"	"		(East of U.S. 40)	85.34	I:Special Exception (R & PP)
	"	"	07	NW1/4NE1/4	40	I:Special Exception (State Indemnity Selection Parcel)
	"	"	07	SE1/4NE1/4		I:Special Exception
	"	"		(West of U.S. 40)		(State Indemnity
	"	"		Centerline	33.79	Selection Parcel)
	"	"	07	Lot 4, SE1/4SW1/4,		I:Special Exception
	"	"		SW1/4SE1/4	120.15	(State Indemnity
	"	"	18	Lots 1, 2, NE1/4NW1/4,		Selection
	"	"		NW1/4NE1/4	161.17	Parcel)
	"	"	18	NE1/4SE1/4	40	II
	"	"	15	SW1/4SW1/4	40	II
	"	"	22	W1/2NW1/4	80	II
	"	"	26	NW1/4SW1/4	40	II
	"	"	26	SE1/4SW1/4	40	II
	"	"	32	E1/2NW1/4	80	II
	"	"	35	SW1/4NW1/4,NW1/4SW1/4	80	II
	1N	76 1/2W	01	Lots 15, 16	63.18	I:Special Exception
	"	"	12	Lots 1,2,3,4,5,6,11,12	253.35	(Exchanges, Etc.)
	1N	77W	12	E1/2NE1/4,NE1/4SE1/4	80	II
	1N	78W	06	SE1/4NE1/4	40	II
	"	"	12	NW1/4SW1/4	40	II
	"	"	19	NW1/4NW1/4	40	II
	"	"	20	SE1/4NW1/4	40	II
	1N	79W	03	Lot 2	41.03	II
	"	"	25	NW1/4NE1/4	40	II
	1N	80W	28	E1/2NE1/4	80	I:Special Exception (DOW)
	"	"	34	Within Lot 1 & 2	25.10	I:Special Exception (DOW)
	1N	80W	09	E1/2,S1/2NE1/4NW1/4,		I:Special Exception (State
				SE1/4NW1/4,E1/2SW1/4	460	Indemnity Selection Parcel)
	1N	80W	15	Lots 1,2,5,7,8,10	178.94	I:Special Exception (state Indemnity Selection Parcel)
	1N	81W	06	SE1/4NE1/4	40	II
	"	"	06	S1/2SE1/4	80	II
	"	"	07	W1/2NE1/4,SE1/4NE1/4	120	II
	"	"	08	SW1/4NW1/4,NW1/4SW1/4	80	II
	"	"	26	SE1/4NE1/4	40	II
	1S	75W	15	E1/2SE1/4	80	II
	1S	76W	07	SE1/4,S1/2NE1/4,		
	"	"		E1/2SW1/4	320	II
	"	"	07	Lots 3, 4	80.65	II
	"	"	08	SW1/4,W1/2SE1/4	240	II
	"	"	17	ALL	640	II

# APPENDIX C

County	Township	Range	Section	Lot/Subdivision	Acres	Disposal Category
Grand (Cont.)	"	"	18	Lot 1, NE1/4NW1/4, NW1/4NE1/4	120.32	II
	"	"	18	SE1/4SW1/4	40	II
	"	"	20	W1/2NW1/4	80	II
	"	"	20	N1/2NE1/4	80	II
	"	"	20	NE1/4NW1/4	40	II
	"	"	20	NW1/4SE1/4	40	II
	"	"	21	NW1/4SW1/4	40	II
	"	"	31	E1/2SW1/4, Lot 4,W1/2SE1/4	200.10	I:Special Exception (USDA-FS)
	1S	77W	02	Lot 5,SW1/4NW1/4, N1/2SW1/4,SW1/4SW1/4, NW1/4SE1/4	240	II
	"	"	12	SE1/4SE1/4	40	II
	"	"	24	SE1/4SE1/4	40	I:Special Exception (USDA-FS)
	"	"	35	E1/2SE1/4	80	I:Special Exception (USDA-FS)
	1S	78W	04	Lot 1, 2	48.94	II
	"	"	04	Lot 16	40	II
	"	"	05	SW1/4SW1/4	40	II
	"	"	17	Lots 1,2,4,6,8,9,11, 12,13,14,16,17,18, 20,21	92.78	II
	"	"	28	SE1/4SW1/4	40	II
	1S	79W	26	S1/2SW1/4	80	I:Special Exception (DOW)
	1S	80W	13	SE1/4NW1/4	40	II
	"	"	19	SW1/4SE1/4	40	I:Special Exception (DOW)
	"	"	20	Lot 1	33.33	I:Special Exception (DOW)
	"	"	23	N1/2NW1/4	80	II
	"	"	26	NE1/4SE1/4	40	II
	"	"	31	Lot 4,SW1/4SW1/4, S1/2NE1/4	161.50	II
	1S	82W	19	Lots 6,7,8,9,SE1/4SE1/4	147.39	I:Special Exception (DOW)
	"	"	21	Lots 1,2,N1/2SW1/4	109.21	I:Special Exception (DOW)
	"	"	27	NW1/4SE1/4	40	I:Special Exception (DOW)
	1S	82W	29	Lots 1, 2	73.22	I:Special Exception (DOW)
	"	"	30	Lots 6, 7	28.02	I:Special Exception (DOW)
	"	"	30	Lot 8	40.86	I:Special Exception (DOW)
	"	"	30	Lot 9	41.10	I:Special Exception (DOW)
Summit	2S	80W	03	Lot 4,SW1/4NW1/4 W1/2SW1/4	160.03	I:Special Exception (Burec-USDA-FS)
	5S	77W	07	Lot 10	1.24	I:Special Exception (USDA-FS)
	"	"	03	W1/2SW1/4	80	I:Special Exception (USDA-FS)
	"	"	04	SW1/4,		
	"	"	05	Lot 1,SE1/4NE1/4, NE1/4SE1/4,		
	"	"	09	NE1/4NW1/4	320.28	II
Eagle	2S	81W	06	Lot 1	40.42	II
	"	"	06	Lot 7	41.42	II
	"	"	06	SE1/4SE1/4	40	II
	"	"	07	NE1/4NE1/4	40	II
	"	"	07	NE1/4SW1/4	40	II
	"	"	07	Lot 4	41.67	II
	2S	82W	02	Lot 6	36	II

# APPENDIX D

## GLOSSARY

**ACTIVE GRAZING PREFERENCE:** The total number of AUMs that can be licensed.

**AD VOLEM TAX:** A tax based on the value of property. Another term for property tax.

**ALLOCATION:** The division of limited resource capabilities or supplies among the competitors for use.

**ALLOTMENT:** An area of land designated and managed for grazing of livestock.

**ALLOTMENT MANAGEMENT PLAN:** A document program which applies to livestock operations on the public lands, prepared in consultation, cooperation, and coordination with the permittee(s), lessees(s), or other affected interests.

**ALLUVIUM:** Unconsolidated rock or soil material deposited by running water including gravel, sand, silt, clay, and various mixtures of these.

**ANIMAL UNIT (AUM):** One mature (1,000 lb) cow or its equivalent (4 deer, 5 antelope, 5 bighorn sheep, 1.25 elk, or 1 horse) based upon an average daily forage consumption of 26 pound of dry matter per day.

**ANIMAL UNIT MONTH (AUM):** The amount of forage necessary for the sustenance of one animal for one month, e.g., one deer for one month equal one deer AUM.

**APPARENT TREND:** Change in vegetation and soil characteristics resulting directly from environmental factors, primarily climate and grazing as observed at one point in time.

**AQUATIC:** Living or growing in or on a stream or other water body of source.

**AQUIFER:** A water bearing bed or stratum of permeable rock, sand, or gravel capable of yielding considerable quantities of water.

**AREA OF CRITICAL ENVIRONMENTAL CONCERN (ACEC):** An area where special management attention is required to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes, or to protect life and safety from natural hazards.

**ASSET MANAGEMENT:** The Department of Interior program to implement the Reagan Administration's initiative to dispose of excess Federal land and real property in order to facilitate better management.

**ATTITUDE:** An intellectual or emotional position with regard to a fact, condition, person, issue, etc., which carries some readiness to act in a particular way.

**BROWSE:** That part of the current leaf and twig growth of shrubs, woody vines, and trees available for animal consumption.

**BUREAUCRATIZATION:** A social process whereby an organization is growing larger and more complex becomes more efficient by depending more and more on impersonal rather than personal decision criteria, more clearly and formally defined roles, more detailed and spelled-out rules and procedures, more specialization and use of experts throughout the organization, more objective hiring and promotion policies, etc. Often the process carries with it the danger of over-rigidity of structure which may become an operational handicap (too much "red tape"), so that an informal "underground" system develops to prevent or break serious bottlenecks. Both the formal and informal social structures seem to be necessary for the most effective functioning of the organization. In the modern world, virtually all large businesses, industries, governmental agencies, religious bodies, universities, and other organizations are bureaucracies.

**CANOPY:** The uppermost layer of vegetation consisting of crowns of trees or shrubs in a forest or woodland.

**CARRYING CAPACITY:** Also known as stocking rate' an estimate of the maximum number of animals (expressed in AUMs) a given area can support each year without inducing damage to the vegetation or related resources.

**CLASS CONSCIOUSNESS:** An awareness among persons of similar general social status that they share commonalities in life styles, values, attitudes, interests, problems, and life opportunities. The term was popularized in the writings of Karl Marx, with special connotations, but in general use merely calls attention to mutual awareness of these shared commonalities.

**CLOSED DESIGNATION:** Areas and trails where the use of motor vehicles is permanently or temporarily prohibited.

**CONSERVATION PLANS/LONG-TERM AGREEMENTS:** Ranch plans developed by the Soil Conservation Service in cooperation with ranchers/local managers. Such plans outline and prescribe conservation practices and allow for a comprehensive ranch improvement program by providing for cost/share incentives.

**CRITICAL RANGE:** Range on which a species depends for survival; there are no alternative

## GLOSSARY

ranges available due to climate conditions or other limiting factors. May also be called key range, or crucial range.

**CULTURAL REMAINS:** All prehistoric and historic physical evidence of past human activity which can be used to reconstruct lifeways and cultural history of past peoples. These include sites, artifacts, environmental data, and other relevant information and the contexts in which they occur.

**CULTURAL RESOURCES:** Those fragile and nonrenewable remains of human activity, occupation, or endeavor reflected in districts, sites, structures, buildings, objects, artifacts, ruins, works of art, architecture, and natural features that were of importance in human events. These resources consist of (1) physical remains, (2) areas where significant human events occurred—even though evidence of the event no longer remains, and (3) the environment immediately surrounding the resource.

**CULTURAL RESOURCE INVENTORY:** A descriptive listing and documentation, including photographs and maps, of cultural resources; included are the processes of locating, identifying, and recording sites, structures, buildings, objects, and districts through library and archival research, information from persons knowledgeable about cultural resources, and varying levels of intensity of on-the-ground field surveys.

**CULTURAL RESOURCE SITE:** A physical location of past human activities or events. Cultural resource sites are extremely variable in size and range from the location of a single cultural resource object to a cluster of cultural resource structures with associated objects and features. Prehistoric and historic sites which are recorded as cultural resources have sociocultural or scientific values and meet the general criterion of being more than 50 years old.

**DISSOLVED SOLIDS:** The total amount of dissolved material, organic and inorganic, contained in water or wastes.

**EASEMENT:** A right afforded a person or agency to make limited use of another's real property for access or other purposes.

**ECOSYSTEM:** Collectively, all populations in a community, plus the associated environmental factors.

**EXCAVATION:** The controlled scientific removal of artifacts and recording of data from subsurface cultural resource deposits.

**EXTENSIVE RECREATION MANAGEMENT AREA:** In these areas, significant recreation opportunities and problems are limited and intensive

recreation management is not required. Minimal management actions related to the Bureau's stewardship responsibilities are adequate in these areas.

**FAIR MARKET VALUE:** The average value of forage consumed (in Animal Unit Months) based on annual livestock market conditions as determined by the USDA.

**FEDERAL LANDS:** Lands owned by the United States, without reference to how the lands were acquired or what Federal agency administers the lands, including mineral estates or coal estates underlying private surface, but excluding lands held by the United States in trust for Indians, Aleuts, or Eskimos.

**FINAL DEMAND:** Exports plus purchases made inside the area with money originating outside.

**FLOODPLAIN:** The nearly level alluvial plain that borders a stream and is subject to inundation during high water.

**FORAGE:** All browse and herbaceous foods that are available to grazing animals. It may be grazed or harvested for feeding.

**FORAGE POTENTIAL:** The optimum amount (lbs/acre) of forage that could be produced in a grazing allotment that is stable, self-perpetuating and in equilibrium with its physical habitat.

**GRAZING PREFERENCE:** The total number (active and suspended nonuse) of animal unit months of livestock grazing on public land apportioned and attached to base property owned or controlled by a permittee.

**GRAZING SYSTEM:** A systematic sequence of grazing treatments applied to an allotment to reach identified multiple-use goals or objectives by improving the quality and quantity of vegetation.

**GRAZING TREATMENT:** A prescription under a grazing system which grazes or rests a unit of land at particular times each year to attain specific vegetation goals.

**GROUND COVER (SOIL):** The material covering the soil and providing protection from, or resistance to, the impact of raindrops, expressed in percent of the area covered. Composed of vegetation, litter, erosion pavement, and rock.

**HABITAT:** The place where an animal or plant normally lives, often characterized by a dominant plant and co-dominant form (pinyon-juniper habitat).

**HABITAT MANAGEMENT PLAN:** A written and officially approved plan for a specific geographic area which identifies wildlife habitat and related objectives, establishes the sequence of actions for

## APPENDIX D

achieving objectives, and outlines procedures for evaluating accomplishments.

**HUNTER DAY:** One hunter spending 12 hours hunting on BLM land, or 12 hunters spending 1 hour each, or any combination of these.

**INPUT-OUTPUT STUDY:** A type of economic model that is based on data about the dollar volume of transactions between different types of businesses in the area. It can estimate the impacts of a change in one type of business on all the other businesses.

**INTENSIVE MANAGEMENT:** Managing a vegetation or other resource through a system to obtain desired results.

**KEY FORAGE AND BROWSE SPECIES:** (1) Forage species whose use serves as an indicator of the degree of use of associated species; (2) those species which must, because of their importance, be considered in the management program.

**KNOWN GEOLOGIC STRUCTURE:** A trap in which an accumulation of oil and gas has been discovered by drilling and which is determined to be productive, the limits of which include all acreage that is presumptively productive (43 CFR 3100.0-5 (a)). If lands are underlain by a "known geologic structure" (KGS), they may be leased only through a competitive system.

**KNOWN RECOVERABLE COAL RESOURCE AREA (KRCRA):** An area, including Federal lands which meet minimum standards for recoverable coal deposits in accordance with accepted mining practices, as determined by the Director, U.S. Geological Survey. The Federal lands in a KRCRA are classified for coal leasing.

**LEASABLE MINERALS:** Minerals such as coal, oil shale, oil and gas, phosphate, potash, sodium geothermal resources, and all other minerals that may be acquired under the Mineral Leasing Act of 1920, as amended.

**LEASE:** An instrument through which interests are transferred from one party to another, subject to certain obligations and considerations.

**LEGAL DESCRIPTION:** The description of a particular parcel of land according to the official plat of its cadastral survey.

**LICENSED USE:** Active use AUMS that a permittee has paid for during a given grazing period.

**LINEAR RIGHT-OF-WAY:** An easement or permit which authorizes public lands to be used for a specified purpose that generally requires a long narrow strip of land; examples are roads, powerlines, pipelines, etc.

**LOCATABLE MINERALS:** Minerals that may be

acquired under the Mining Law of 1872, as amended.

**LONG-TERM:** A point in time 20 years following the beginning of the implementation phase for the RMP.

**MORES:** Strong moral rules for behavior, informally developed over time by a society or other social group. May or may not be formalized into a written legal system. Mores tell members what they must do and what they must not do for moral reasons. In the U.S. society, most of the mores are also written into formally enacted laws.

**MULTIPLE-USE:** The management of public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people.

**OFF-ROAD VEHICLE (ORV):** Any motorized vehicle capable of, or designed for travel on or immediately over land, water, or other natural terrain.

**OFF-ROAD VEHICLE DESIGNATION OPEN:** Designated areas and trails where off-road vehicles may be operated (subject to operating regulations and vehicle standards set forth in BLM Manuals 8341 and 8343).

**LIMITED:** Designated areas and trails where the use of off-road vehicles is subject to restrictions, such as limiting the number or types of vehicles allowed, dates, and times of use (seasonal restrictions); limiting use to existing roads and trails; or limiting use to designated roads and trails. Under the designated roads and trails designation, use would be allowed only on roads and trails that are signed for use. Combinations of restrictions are possible, such as limiting use to certain types of vehicles during certain times of the year.

**CLOSED:** Designated areas and trails where the use of off-road vehicles is permanently or temporarily prohibited. Emergency use of vehicles is allowed.

**OPTIMUM NUMBERS:** The number of animals that may survive on a given range in reasonable condition.

**PALEONTOLOGY:** A science dealing with the life and past geological periods as known from fossil remains.

**PERENNIAL WATER:** Bodies of water or streams which contain water yearlong.

**PERMITTEE:** One who holds a permit to graze livestock on public land.

**PHENOLOGY:** The study of periodic biological phenomenon such as flowering and seeding, especially as related to climate.

**PLANT VIGOR:** The state of health of a plant. The

## GLOSSARY

capacity of a plant to respond to growing conditions, to make and store food, and to complete the reproductive stages.

**PREFERENCE RIGHT LEASE:** The right of an applicant to apply for resources in public lands before the general public. For example, an applicant who had discovered a mineral deposit under a prospecting permit might be allowed a preference right lease over any other lease applicant.

**PRIORITY USE AREA:** An area where a particular resource, such a wildlife habitat, would receive management emphasis or priority. The areas are either unique, significant, or best suited for the development, management, use or protection of a resource. The principles of multiple use and sustained yield would be maintained in each priority area, but the priority use would have the first priority. Other land uses would have limits places on them to prevent conflicts with the priority resource. In some instances, a use totally incompatible with the priority resource would be excluded.

**PUBLIC LAND:** Vacant, unappropriated, and unreserved lands which have never left Federal Ownership; also, lands in Federal ownership which were obtained by the Government in exchange for public lands or for timber on public lands. Land administered by the Bureau of Land Management.

**RANGE CONDITION INVENTORY:** An inventory conducted during 1980 which include field mapping of range sites by condition class for individual grazing allotments. This information was used to determine initial livestock allocation levels using the parameters of the Soil Conservation Service Range Stocking Guide.

**RANGE FORAGE CONDITION:** A condition rating based on the amount of forage (lbs/acre) currently produced on an allotment in relation to its potential forage production (lbs/acre). Unsatisfactory - currently less than 75 percent of potential. Satisfactory - currently 75 percent or more of potential.

**RANGE IMPROVEMENT:** A structure, development, or treatment used to rehabilitate, protect, or improve the public lands to enhance the range resource.

**RANGELAND MONITORING PROGRAM:** A program designed to measure changes in plant composition, ground cover, animal populations, and climatic conditions on the public rangeland. Vegetation studies are used to monitor changes in rangeland condition and determine the reason for any changes that are occurring. The vegetation

studies consist of actual use, utilization, trend, and climatic conditions.

**RANGE SITE:** A distinctive kind of rangeland that differs from other kinds of rangeland in its potential to produce native plants.

**RECREATION OPPORTUNITY SPECTRUM:** A continuum used to characterize recreation opportunities in terms of setting, activity and experience opportunities. (See Appendix 5 for a description of specific classes.)

**RECREATION VISITOR DAY:** An aggregation of 12 visitor hours, where a visitor hour is the presence of one or more person on lands and water for outdoor recreation purposes for continuous, intermittent, or simultaneous periods aggregating 60 minutes; e.g., one person for one hour, two persons for one-half hours each, etc.

**RESEARCH NATURAL AREA (RNA):** An area that is established and maintained for the primary purpose of research and education because the land has a threatened or endangered plant or animal species. It is a biological unit in which present natural conditions are maintained. These conditions are achieved by allowing natural biological processes to prevail without human intervention.

**REPARIAN:** Situated on or pertaining to the bank of a river, stream, or other body of water. Normally used to refer to the plants of all types that grow rooted in the watertable of streams, ponds, and springs.

**RIPARIAN COMMUNITIES:** Vegetation communities found in association with either open water or water close to the surface; includes meadows, aspen, and other trees and shrubs in association with streams and other water sources.

**RIPARIAN HABITAT, AQUATIC (STREAMSIDE):** Vegetation communities found in association with streams (both perennial and intermittent), lakes, ponds and other open water. This unique habitat, comprising less than 1 percent of the land area, is crucial to the continued existence of the fish species known to occur. Streamside vegetation maintains high water tables, stabilizes streambanks, creates quality fishery habitat, and maintains water quality. It is also essential to most terrestrial wildlife species.

**RIPARIAN HABITAT, TERRESTRIAL:** Vegetation communities found in association with either open water or water close to the surface; includes such habitat features as meadows, aspen stands, and/or other trees and shrubs. This unique habitat is crucial to the continued existence of the majority of the terrestrial wildlife species known to occur. Many species are found nowhere else.

## GLOSSARY

**ROAD:** Vehicle routes which have been improved and maintained by mechanical means to insure relatively regular and continuous use.

**SALABLE MINERALS:** Minerals such as common varieties of sand, stone, gravel, cinders, pumice, pumicite, and clay that may be acquired under the Materials Act of 1947, as amended.

**SALVAGE:** The recovery of material and data from an affected cultural resource prior to its alteration or destruction, through recordation, documentation, partial or total excavation, and collection for analysis and interpretation.

**SCOPING PROCESS:** An early and open process for determining the scope of issues to be addressed and for identifying the significant issues and related to a proposed action.

**SEDIMENTATION:** The act or process of depositing a material, such as water depositing suspended soil particles in an area, such as a stream bottom.

**SEDIMENT YIELD:** The amount of sediment given up by a watershed over a specific time period, usually a year. Ordinarily, it is expressed as tons, acre feet, or cubic yards of sediment per unit of drainage area per year.

**SHORT-TERM:** The period of time needed to implement management's decisions following the completion of the EIS, approximately 5 to 7 years.

**SOCIAL CONTROLS:** Those devices, techniques, facilities, social institutions, or persons responsible for keeping human behavior within socially defined bounds. Formal social controls would be such institutions as police departments, prison systems, or schools; informal controls would be parental discipline, gossip, shunning or other personal rejection, or social rewards given for the purpose of producing desired behavior.

**SOCIAL PSYCHOLOGICAL:** Having to do with those aspects of individual personality, opportunities, needs, beliefs, behaviors, or other characteristics of individuals which are social induced; the junction of the external society and the individual biological person, whose social influences and demands produce an effect upon the person.

**SOCIAL RELATIONSHIP:** The set of reciprocal norms and statuses which define how persons occupying the statuses are expected to behave and think toward each other. For example, the statuses of "father" and "son" are defined by reciprocal norms (behavioral obligations recognized not only by a given father and his son, but also expected of them by the general society of which they are a part). Therefore "father-son" is a social relationship.

**SOCIAL STRATIFICATION:** An observable but not clearly defined placement of the members of a society into a hierarchical social class system, based on some combination of factors usually including education, income, and occupation. For convenience, the logical continuum is often arbitrarily divided into "social class" levels (upper, working, lower, middle) depending on these factors plus other criteria such as common life styles, belief systems, life chances, etc.

**SOCIAL STRUCTURE:** A concept referring to the highly complex set of normatively developed interrelationships among sub-groups within a society, especially among those social institutions (education, economics, politics, etc.) whose integration is essential to the smooth functioning of the society. Social structure does not refer to the behaviors of individuals, but to socially constructed relational patterns among groups and among positions within groups which produce orderly and comprehensible interaction among persons and groups.

**SOCIAL VALUES:** Learned ideological stances which guide social norms, help integrate social groups, and guide personal and group goals, beliefs, attitudes, and behavior. The societal values of "justice" in the U.S., for instance, directs the way we socialize children; define, judge, and punish crimes; distribute goods and money; grade students; promote employees; elect politicians; and many other daily choices. The sharing of values underlies our choices of friends and mates, and gives us a sense of "belonging" to the general group.

**SPECIAL RECREATION MANAGEMENT AREA:** Areas requiring explicit recreation management to achieve the Bureau's recreation objectives and to provide specific recreation opportunities. Special management areas are identified in the RMP, which also defines the management objectives for the area. Major Bureau recreation investments are concentrated in these areas.

**SPECIES, ENDANGERED:** An animal or plant whose prospects of survival and reproduction are in immediate jeopardy, and as is further defined by the Endangered Species Act of 1973, as amended.

**SPECIES, SENSITIVE:** A Designation which is (1) applied to species not yet officially listed but which are undergoing a status review or are proposed for listing according to Federal Register notices published by the Secretary of the Interior, or the Secretary of Commerce, or in accordance with comparable state documents published by

## APPENDIX D

state officials; (2) applied to species whose populations are consistently small and widely dispersed or whose ranges are restricted to a few localities, such that any appreciable reduction in numbers, habitat availability, or habitat condition might lead toward extinction; or (3) applied to species whose numbers are declining so rapidly that official listing may become necessary as a conservation measure.

**SPECIES THREATENED:** Any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range, and as is further defined by the Endangered Species Act of 1973, as amended.

**STEPPE-TYPE VEGETATION:** Vegetation found on arid lands that usually have extreme temperature ranges and loess (wind deposited) soils.

**SUSTAINED YIELD:** The achievement and maintenance in perpetuity of a high level of annual or regular periodic output of the various renewable resources of the public lands consistent with multiple use.

**TIME SERIES MODEL:** A statistical method, using multiple correlation, that relates changes over time in the item under study to changes in several other items that are assumed to affect the first one.

**TOTAL SUSPENDED PARTICULATES:** All solid or semi-solid material found in the atmosphere less than 500 microns in size.

**TREND:** The direction of change in range condition over a period of time, expressed as upward, static, or downward.

**UNDERSTORY:** Plants growing beneath the canopy of other plants. Usually refers to grasses, forbs, and low shrubs under tree or brush canopy.

**UTILIZATION:** The portion of the current year's forage production that is consumed or destroyed by grazing animals. May refer either to a single species or to the vegetation as a whole.

**VEGETATION:** Plants in general or the sum total of the plant life above and below ground in an area.

**VEGETATION MANIPULATION PROJECTS:** Actions taken which alter the existing natural plant communities to achieve the goals of management in a particular area. There are several ways in which vegetation can be altered: (1) with fires; (2) mechanically, which includes chaining, plowing or crushing; (3) chemically, and (4) biologically.

**VEGETATION TYPE:** A plant community with distinguishable characteristics.

**VISUAL RESOURCE:** Land, water, vegetation, animal, and other visible features.

**VISUAL RESOURCE MANAGEMENT (VRM):** The planning, designing and implementation of management objectives to provide acceptable levels of visual impacts for all BLM resource management activities.

**VISUAL RESOURCE MANAGEMENT CLASSES:** The degree of acceptable visual change within a characteristic landscape. A class is based upon the physical and sociological characteristics of any given homogeneous area and serves as a management objective.

**CLASS I:** Areas (preservation) provide for natural ecological changes only. This class includes primitive areas, some natural areas, some wild and scenic rivers, and other similar sites where landscape modification activities should be restricted.

**CLASS II:** (particle retention of the landscape character) includes areas where changes in any of the basic elements (form, line, color, or texture) caused by a management activity should not be evident in the characteristic landscape.

**CLASS III:** (particle retention of the landscape character) includes areas where changes in the basic elements (form, line, color, or texture) caused by a management activity may be evident in the characteristic landscape. However, the changes should remain subordinate to the visual strength of the existing character.

**CLASS IV:** (modification of the landscape character) includes areas where changes may subordinate the original composition and character; however, they should reflect what could be a natural occurrence within the characteristic landscape.

**CLASS V:** (rehabilitation or enhancement of the landscape character) includes areas where change is needed. This class would apply to areas where the quality class has been reduced because of unacceptable intrusions. It should be considered an interim short-term classification until one of the other classes can be reached through rehabilitation or enhancement.

**VISUAL SENSITIVITY:** Degree of concern expressed by the user toward scenic quality and existing or proposed visual change in a particular characteristic landscape.

**VOLUNTARY ASSOCIATIONS:** Those formal organizations (such as clubs, churches, the C of

## GLOSSARY

C) to which individuals belong from free choice because of the benefits they perceive for themselves in membership.

**WATERSHED:** A total area of land above a given point on a waterway that contributes runoff water to the flow at that point.

**WATERSHED, SENSITIVE:** An area with adverse geologic, soil, and/or vegetative conditions which cause a fragile situation. Small changes in land use intensity can cause large changes in erosion rates. Some of these areas are already experiencing accelerated erosion.

**WILDERNESS CHARACTERISTICS:** Identified by Congress in the 1964 Wilderness Act: namely, size, naturalness, outstanding opportunities for solitude or a primitive and unconfined type of recreation, and supplemental values such as geological, archaeological, historical, ecological, scenic, or other features. It is required that the area possess at least 5,000 acres or more of continuous public land or be of a size to make practical its preservation and use in an unimpaired condition; be substantially natural or generally appear to have been affected primarily by the forces of nature, with the imprint of man being substantially unnoticeable; and have either outstanding opportunities for solitude or a primitive and unconfined type of recreation. Congress stated that a wilderness area may also have supplemental values, which include ecological, geological, or other features of scientific, educational, scenic, or historical value.

**WILDERNESS MANAGEMENT POLICY:** A policy document prescribing the general objectives, policies, and specific activity guidance applicable to all designate BLM wilderness areas. Specific management objectives, requirements, and decisions implementing administrative practices and visitor activities in individual wilderness areas are developed and described in the wilderness management plan for each unit.

**WILDERNESS STUDY AREA (WSA):** A roadless area which has been found to have wilderness characteristics.

**WILDERNESS VALUES:** The wilderness characteristics and multiple resource benefits of an area.

**WILD HORSES:** All unbranded and unclaimed horses and their progeny that have public lands on or after December 15, 1981, or that do use these lands as all or part of their habitat.

**XERIC VEGETATION:** Vegetation adapted to dry conditions.

## ACRONYMS

<b>ACEC:</b>	Area of Critical Environmental Concern
<b>AMPL:</b>	Allotment Management Plan
<b>AUM:</b>	Animal Unit Month
<b>BLM:</b>	Bureau of Land Management
<b>CEQ:</b>	Council of Environmental Quality
<b>CDOW:</b>	Colorado Division of Wildlife
<b>EIS:</b>	Environmental Impact Statement
<b>ERMA:</b>	Extensive Recreation Management Area
<b>HMP:</b>	Habitat Management Plan
<b>KGS:</b>	Known Geologic Structure
<b>KRCRA:</b>	Known Recoverable Coal Resource Area
<b>ONA:</b>	Outstanding Natural Area
<b>PRLA:</b>	Preference Right Lease Application
<b>RNA:</b>	Research Natural Area
<b>RMP:</b>	Research Natural Plan
<b>SRMA:</b>	Special Recreation Management Area
<b>USDA:</b>	U.S. Department of Agriculture
<b>USDI:</b>	U.S. Department of Interior
<b>USFS:</b>	U.S. Forest Service
<b>USFWS:</b>	U.S. Fish and Wildlife Service
<b>WSA:</b>	Wilderness Study Area